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ABSTRACT

This manual, intended to help administrators, specialists, and teachers in Alberta, Canada, understand a problem-solving, process-based approach to assessment of special needs students using multiple sources of information. Assessment outcomes are viewed as describing needs and influencing education programs, rather than being used to provide labels or justification for why students are not learning. The manual stresses the importance of an effective team assessment program based on well-articulated policies and procedures. The introductory chapter discusses the premises of the manual, assumptions about its users, and the format and structure of the manual. Section 1 is an assessment workbook with chapters which help the user examine current assessment knowledge, beliefs, and practices; consider the definition and purpose of assessment; and work through the assessment process using two sample scenarios. Section 2 focuses on critical issues in assessment, in chapters which cover: (1) a philosophy of educational assessment; (2) deciding who is to be assessed; (3) referral and assessment planning; (4) assessment procedures; and (5) assessment results. The final section offers guidelines for developing assessment policies and procedures. Contains 82 references. (DB)

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UNDERSTANDING STUDENTS' NEEDS:

A Guide for Developing and Implementing Assessment Procedures for Students Encountering Educational Challenges

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INTRODUCTION

INTRODUCTION

Administrators in XYZ School Jurisdiction want to implement a systemwide testing program to complement the information provided by the provincial achievement testing program. They are searching for testing tools to use in gathering information and are considering using group tests of language arts and mathematics achievement as well as group intelligence tests at the elementary and secondary levels.

Administrators of Alphabet School Jurisdiction are concerned about the large numbers of students who appear to be encountering great difficulty in their first year of school. The teachers feel that many of these students are "just not ready for school." The administrators and teachers are interested in finding out more about the students and their educational progress.

Four students in Mr. Green's class repeatedly exceed curriculum expectations. He has given them enrichment activities and opportunities to tutor other students, but can't seem to keep them interested. He is concerned that they are bored. He would like to collect information to assist in making program placement and program planning decisions.

Johnny, age 13, has just transferred to the school jurisdiction as he has moved to a new foster home, his fifth in three years. Past school records are very sketchy. The principal and teacher wonder what skills and knowledge Johnny has already acquired.

A new junior high science curriculum is being implemented. Four teachers will be using it in ABC Junior High School and the principal is interested in finding out how well students do in each of these four classes. Two of the classes contain several students with special needs.

Each of these vignettes describes a situation in which assessment is warranted. In some cases, the assessment will involve one student; in other cases, it will involve a group of students. For each situation, there are many issues that need to be considered in order to ensure that the assessment is appropriate and that the results are meaningful.

INTRODUCTION

The purpose of this manual is to help administrators, specialists and teachers understand the process of assessment so that effective procedures can be developed and implemented for students encountering educational challenges.

While a variety of terms have been used to describe ***students encountering educational challenges***, the terms most frequently used by Alberta Education are *students with exceptional needs*, *students with special needs* and *exceptional students*. According to the Alberta *School Act* (1988), these are students who are in need of special education programs because of their "behavioral, communicational, intellectual, learning or physical characteristics, or a combination of those characteristics" (Section 29(1), p. 29). They may require changes to the regular curriculum, staffing, instructional strategies, facilities or equipment and may require specialized health care services.

Students with exceptional or special needs/exceptional students include gifted and talented learners as well as those who are encountering difficulty learning due to internal and/or external factors. Internal factors may include a lack of knowledge and skills, cognitive processing difficulties, and emotional or motivational factors. External factors may include poor attendance, and inappropriate placement, environment or teaching methods. These students may have learning disabilities, be developmentally delayed, have behavior disorders and/or have physical, mental and/or medical disabilities. Some will not fit any of these descriptions but will still encounter significant difficulty learning. With the increasing expectation that schools address the individual needs of all students in the regular classroom and be accountable for each student's progress, the need for articulated policies and procedures for assessment has become apparent.

Basic Premises of the Assessment Model

The assessment model in this manual contains several basic premises that reflect current thinking about assessment.

- **There is no one "right" way to do an assessment.**

  Assessment procedures will vary depending on the purpose of the assessment.

- **Educational assessment is not a specific task and is not synonymous with testing, evaluation or measurement.**

  Rather, it is an ongoing process of identifying a purpose, gathering information to address that purpose, generating education program plans based on the information gathered and evaluating the effectiveness of those plans in practice. Testing, evaluation and measurement may be part of the assessment process, where appropriate.

- **Beliefs and values regarding the goals of education, the causes of individual differences, and the way students learn, influence assessment procedures and subsequent education practice.**

  Clarification of beliefs and values is an important step in considering assessment policy and practice.

- **Assessment practice is based on a knowledge and understanding of research and theory.**

  Current research and theory on development, learning and effective practices in education all influence assessment.

- **Multiple sources of information are necessary for effective program planning and decision-making.**

  No single source of information is sufficient to understand and plan for the needs of a student or group of students. Several sources of information (e.g., observation, interview data, work samples) are necessary for an understanding of students' needs.

- **Assessment outcomes should describe needs and should influence education programs.**

  Too often, assessment results are used to provide labels or justification for why a student has not learned, or are simply filed away. Results should be used to describe the needs of students and to plan appropriate instruction.

- **Well-articulated policies and procedures are critical for effective assessment.**

  Accessible written policies and procedures facilitate understanding and communication among all participants involved in the process.

- **Effective development and implementation of assessment policies and procedures is a team effort, benefiting from the input of parents[1], students, teachers, specialists, administrators and trustees.**

  Input from all stakeholders will facilitate understanding and communication, and lead to accepted, coordinated programming.

---

[1] For the purpose of this document, the term *parent(s)* refers to *parent(s)/guardian(s)/caregiver(s)*.

- **Assessment is not an event, but an ongoing daily practice used by teachers for planning effective instruction.**

  Special assessments may be used from time to time to augment the teacher's ongoing collection of information on every student.

Format

This manual is designed to help readers consider some issues related to assessment and to develop programs and policies specific to their particular needs. Vignettes and case studies are presented with questions that encourage readers to think about and apply the information provided. The manual can be used by people with varying levels of knowledge about the assessment process and with varying responsibilities for assessment. Some users may be involved in providing assessment services while others may have responsibility for assessment policy.

Note: The manual is not intended to train readers in assessment practice.

Structure

The manual is divided into five sections.

SECTION I	SECTION II	SECTION III	SECTION IV	
ASSESSMENT WORKBOOK	ISSUES TO CONSIDER IN ASSESSMENT	GUIDELINES FOR DEVELOPING ASSESSMENT POLICY AND PROCEDURES	SUMMARY	REFERENCES
Status of assessment in your school/jurisdiction Definition and purpose of assessment Working through the assessment process	Determining your philosophy Deciding who will be assessed Referral and assessment planning Assessment procedures Assessment results	Guidelines for developing assessment policy and procedures		

Section I (Chapters 1-3) encourages readers to consider some issues and work through steps in the assessment process.

- **Chapter 1** involves guided self-reflection in which readers consider their understanding of the assessment process and assessment policies and procedures in their school or school jurisdiction.
- **Chapter 2** includes a definition of *assessment*. Readers are asked to respond to vignettes that illustrate possible purposes for assessment and some issues related to specific purposes.
- **Chapter 3** uses flow diagrams to show the steps and decisions involved in an individual assessment and a group assessment. The flow diagrams illustrate how the purpose of assessment influences procedures and outcomes.

Section II (Chapters 4-8) provides background information on issues raised in the first three chapters. Vignettes are used to illustrate the points. At the end of each chapter in this section, guidelines for the development of policy and procedures are suggested.

- **Chapter 4** discusses the importance of examining philosophies of education and learning. Factors that influence personal and public philosophies are described.
- **Chapter 5** focuses on the selection of students for assessment. Factors influencing selection are described and guidelines for pre-referral and identification are included.
- **Chapter 6** describes steps and issues to be considered in the referral and assessment planning process.
- **Chapter 7** provides an overview of formal and informal types assessment, common test terminology, types of tests, issues in group administration, and test bias. This overview does not replace resources that provide in-depth information on assessment procedures (e.g., resources in the *Reference* list and university or inservice courses).
- **Chapter 8** discusses issues, including ethical considerations, concerning the recording and reporting of assessment results.

Section III (Chapter 9) presents a checklist, compiled from the guidelines in each chapter, that can be used to develop and implement assessment procedures and policies.

Section IV is a summary of the manual.

SECTION I

ASSESSMENT WORKBOOK

- Status of Assessment in Your School/Jurisdiction
- Definition and Purpose of Assessment
- Working Through the Assessment Process

CHAPTER 1

STATUS OF ASSESSMENT IN YOUR SCHOOL/JURISDICTION

The purpose of this chapter is to help you consider your understanding of assessment and the assessment policies and practices in your school or school jurisdiction.

The information gathered in this chapter will serve several purposes. First, it will help you think about where you and your school or jurisdiction stand in terms of assessment policies and procedures. Second, it will help you focus on the sections of this manual that are of greatest interest to you. You may find that your school or jurisdiction has developed well-articulated policies in some areas but may need to reevaluate other areas.

This chapter is divided into three parts. The first part requests some demographic information and asks questions about your understanding of assessment and your understanding about roles and responsibilities in the assessment process. In the second part, you will be asked to think about a particular assessment conducted in your school/jurisdiction. Questions focus on the purpose for the assessment, the procedures that were followed and whether the information gathered was useful. In the third part, specific questions will be asked about your understanding of current policies and procedures in your school or jurisdiction.

Where appropriate, space is provided to further specify an individual's position. For example, a "jurisdiction administrator" may be further specified as a "superintendent" or "director of guidance and counselling," and a "regular class teacher" may be further specified as "elementary" or "language arts," etc..

Information About the User

1. **What is your current position?** Position

   a. jurisdiction administrator ____________________

   b. school-based administrator ____________________

   c. jurisdiction special services ____________________

   d. school-based special services ____________________

   e. counsellor ____________________

   f. resource teacher ____________________

   g. special education teacher ____________________

   h. regular class teacher ____________________

   i. specialist teacher ____________________

   j. consultant ____________________

   k. other ____________________

2. a. **How many years of experience do you have in your current position?** _______

   b. **How many years of experience do you have in total?** _______

   c. **List past positions you have held.**

Position	No. of Years
____________________	_______
____________________	_______
____________________	_______
____________________	_______

   d. **How many years of experience have involved assessment of students with exceptional needs?** _______

STATUS OF ASSESSMENT IN YOUR SCHOOL/JURISDICTION

3. **How many students are there in your school jurisdiction?**

   a. 20,000 or over _____
   b. 5,000 - 19,999 _____
   c. 3,000 - 4,999 _____
   d. 1,000 - 2,999 _____
   e. 100 - 999 _____
   f. under 100 _____

4. **How many students are you responsible for assessing?**

   a. all in jurisdiction _____
   b. part of jurisdiction (specify) ____________________ _____
   c. several schools (specify) ____________________ _____
   d. one school _____
   e. one class _____
   f. other (specify) ____________________ _____
   ____________________ _____

5. **What does the term "assessment" mean to you?**

   ____
   ____
   ____
   ____

STATUS OF ASSESSMENT IN YOUR SCHOOL/JURISDICTION

6. **What are your assessment responsibilities?**

Check all that apply. You may prioritize responsibilities by numbering, if appropriate. Indicate if you do these things by yourself or as part of a team.

		Self	Team
a.	Make decisions about assessment policy and procedures.	_____	_____
b.	Identify groups of students to be assessed.	_____	_____
c.	Identify individual students to be assessed.	_____	_____
d.	Make decisions about assessment procedures to be used in particular situations.	_____	_____
e.	Carry out some or all of the procedures used in assessment.	_____	_____
f.	Meet with parents about assessment plans.	_____	_____
g.	Meet with parents about assessment results.	_____	_____
h.	Plan education programs based on assessment results.	_____	_____
i.	Provide or plan inservice programs on assessment.	_____	_____
j.	Make decisions on appeals by parents concerning their children's education plan/program.	_____	_____
k.	Have other responsibilities related to assessment. (specify)		
	______________________________	_____	_____
	______________________________	_____	_____
	______________________________	_____	_____
l.	Have no responsibilities in this area.	_____	_____

STATUS OF ASSESSMENT IN YOUR SCHOOL/JURISDICTION

7. **Indicate the position of the individuals in your school or school jurisdiction who are responsible for each of the following tasks.**

Check all that apply. If a team has responsibility, check the column under team and indicate the position of the person who heads the team. If you do not know, check the column under DK (don't know).

	Responsibility	Team	Position	DK
a.	Makes decisions about assessment policy and procedures.			
b.	Identifies groups of students to be assessed.			
c.	Identifies individual students to be assessed.			
d.	Makes decisions about assessment procedures to be used in particular situations.			
e.	Carries out some or all of the procedures used in assessment.			
f.	Meets with parents about assessment plans.			
g.	Meets with parents about assessment results.			
h.	Plans education programs based on assessment results.			
i.	Provides or plans inservice programs on assessment.			
j.	Makes decisions on appeals by parents concerning their children's education plan/program.			
k.	Have other responsibilities related to assessment. (specify)			

8. **Number of assessments in which you are involved each year.**

   a. 0 - 4 _____
   b. 5 - 10 _____
   c. 11 - 20 _____
   d. 21 - 40 _____
   e. more than 40 _____

Summary

Responses to questions 1 through 4 provide demographic data regarding your past experience, your current position and your school jurisdiction. Question 5 provides a preliminary look at how you define *assessment*. Questions 6, 7 and 8 relate to your own and others' responsibilities with respect to assessment. Many DON'T KNOW responses may suggest that policies and procedures are unclear or poorly communicated.

Current Assessment Practices

This series of questions examines your current assessment practices. Think about a familiar situation involving assessment of a student or group of students. The scenarios at the beginning of this manual may remind you of a similar situation in your school or jurisdiction. Describe the situation below. Include information about the students assessed (number, age, grade and gender, if relevant) and the reason for the assessment. Include any other relevant information.

1. **What was the purpose of this assessment?**

2. **What were some specific questions to be answered through this assessment?**
   If the specific questions were unclear to you, please indicate this.

STATUS OF ASSESSMENT IN YOUR SCHOOL/JURISDICTION

3. **Who requested this assessment?**

Check all that apply. Numbering may be used to indicate priority.

	Position
a. jurisdiction administrator	______________________
b. school-based administrator	______________________
c. jurisdiction special services	______________________
d. school-based special services	______________________
e. counsellor	______________________
f. resource teacher	______________________
g. special education teacher	______________________
h. regular class teacher	______________________
i. specialist teacher	______________________
j. parent	______________________
k. other	______________________
l. don't know	______________________

4. **Who decided what would be done in this assessment?**

a. individual

Position ____________________

b. team

Positions ______________________________

____

____

5. **Was there a key person responsibile for the overall assessment?**

Yes	No	DK
_____	_____	_____

If yes, who was responsible? ____________________
position

STATUS OF ASSESSMENT IN YOUR SCHOOL/JURISDICTION

6. **What kind of information was gathered in the assessment?**

Indicate yes, no, don't know (DK) or not relevant (NR) for each of the following.

	Yes	No	DK	NR
a. observation	____	____	____	____
b. interview with and/or information from parents	____	____	____	____
c. interview with student(s)	____	____	____	____
d. interview with and/or information from teachers	____	____	____	____
e. information from others, inside and/or outside school (specify sources)				
____________________	____	____	____	____
____________________	____	____	____	____
f. work samples	____	____	____	____
g. checklists and/or rating scales	____	____	____	____
h. class test scores	____	____	____	____
i. individual informal test results	____	____	____	____
j. individually-administered standardized test scores from:				
· achievement tests	____	____	____	____
· aptitude tests	____	____	____	____
· developmental/screening	____	____	____	____
· cognitive processing tests (e.g., perception, memory)	____	____	____	____
· speech/language tests	____	____	____	____
· affective or personality tests	____	____	____	____
· intelligence tests	____	____	____	____
· vocational tests	____	____	____	____

	Yes	No	DK	NR
k. group-administered standardized test scores from:				
· achievement tests	____	____	____	____
· aptitude tests	____	____	____	____
· developmental/screening tests	____	____	____	____
· cognitive processing tests	____	____	____	____
· speech/language tests	____	____	____	____
· affective or personality tests	____	____	____	____
· intelligence tests	____	____	____	____
· vocational tests	____	____	____	____
l. other (specify)				
______________________	____	____	____	____
______________________	____	____	____	____
______________________	____	____	____	____

7. **Who was involved in gathering the information?**

	Yes	No	DK	NR
a. teacher	____	____	____	____
b. resource teacher	____	____	____	____
c. counsellor	____	____	____	____
d. special services staff (specify positions)				
______________________	____	____	____	____
______________________	____	____	____	____
______________________	____	____	____	____
e. jurisdiction personnel (specify positions)				
______________________	____	____	____	____
______________________	____	____	____	____
______________________	____	____	____	____

	Yes	No	DK	NR
f. other (specify)				
____________________	____	____	____	____
____________________	____	____	____	____
____________________	____	____	____	____

8. **What was done with the results from this assessment?**

	Yes	No	DK
a. recorded in the student's cumulative file	____	____	____
b. reported in a written report	____	____	____
c. reported orally in a conference or team meeting	____	____	____
d. other (specify)			
____________________	____	____	____
____________________	____	____	____

9. **Who was given, or had access to, the results from the assessment?**

	Position	Yes	No	DK
a. jurisdiction administrator	____________	____	____	____
b. school-based administrator	____________	____	____	____
c. jurisdiction special services	____________	____	____	____
d. school-based special services	____________	____	____	____
e. counsellor	____________	____	____	____
f. resource teacher	____________	____	____	____
g. special education teacher	____________	____	____	____
h. regular class teacher	____________	____	____	____
i. specialist teacher	____________	____	____	____
j. consultant	____________	____	____	____
k. parent	____________	____	____	____
l. student(s)	____________	____	____	____
m. other	____________	____	____	____

STATUS OF ASSESSMENT IN YOUR SCHOOL/JURISDICTION

10. **How were the assessment results used?**

	Yes	No	DK
a. to determine placement	____	____	____
b. to develop an Individualized Program Plan (IPP)	____	____	____
c. to obtain additional resources	____	____	____
d. for placement or program evaluation	____	____	____
e. for school or jurisdiction evaluation	____	____	____
f. other (specify)	____	____	____
____________________	____	____	____
____________________	____	____	____

11. **What specific actions were taken as a result of this assessment?**

____

____

____

12. **Was there follow-up to ensure that recommendations from the assessment were implemented?**

Yes	No	DK
____	____	____

If yes, how many of the recommendations were implemented?

1	2	3	4	5
Very few	Some	About ½	Many	All

STATUS OF ASSESSMENT IN YOUR SCHOOL/JURISDICTION

13. **Did the results provide the type of information needed to answer the questions that initiated the assessment?**

14. **In what ways do you feel the student(s) benefited from the assessment?**

15. **If this assessment occurred some time ago, have you had an opportunity to follow the progress of the student(s)?** Yes ____ No ____

If yes, do you think the original objective of the assessment was achieved?

16. **Relative to other assessments in which you have been involved, how would you rate the overall quality of this assessment?**

1	2	3	4	5
Very low quality	Below average	Average	Above average	High quality

17. **If you could do this assessment again, what would you do differently?**

____

____

____

____

____

Summary

Your responses to the questions in this section provide a basis for ascertaining your understanding of the assessment process used in your school or jurisdiction. Again, many DON'T KNOW responses may indicate the need to more clearly articulate or communicate policies and procedures. The range of personnel involved in assessment, the types of assessment procedures employed and the use made of the assessment results are highlighted. A key question is whether the procedures used provided the information needed.

STATUS OF ASSESSMENT IN YOUR SCHOOL/JURISDICTION

Current Policies and Procedures

Some of the questions in the previous two sections may have been difficult to answer if your school or jurisdiction does not have a well-articulated assessment policy or if you are unfamiliar with existing policy. In this section, a series of questions will help you clarify your knowledge of existing policies and procedures. This section will also serve to pinpoint areas that may require some development or change.

1. **Does your school jurisdiction have an assessment policy that outlines its philosophy and procedures?** Yes _____ No _____ DK _____

IF YOU ANSWERED "NO" OR "DK" TO QUESTION 1, YOU MAY WANT TO STOP AT THIS POINT.
IF YOU ANSWERED "YES," PLEASE CONTINUE.

2. **Are you familiar with this policy?**

1	2	3
Not at all	Somewhat	Very

IF YOU ANSWERED "NOT AT ALL," YOU MAY WANT TO STOP AT THIS POINT.
IF YOU ARE "SOMEWHAT" OR "VERY" FAMILIAR WITH THE POLICY, PLEASE CONTINUE.

3. **Do you know who has the responsibility to ensure that the assessment policy is followed?** Yes_____ No _____

If yes, who? ______________________________
position

4. **Do you know who has responsibility for revisions to the assessment policy?**

Yes _____ No _____

If yes, who? ______________________________
position

5. **Who has input into development of, or changes in, policy?**

		Position	Yes	No	DK
a.	jurisdiction administrator				
b.	school-based administrator				
c.	jurisdiction special services				
d.	school-based special services				
e.	counsellor				
f.	resource teacher				
g.	special education teacher				
h.	regular class teacher				
i.	specialist teacher				
j.	parent				
k.	student(s)				
l.	trustees				
m.	other				

6. **Who has access to the policy?**

		Position	Yes	No	DK
a.	jurisdiction administrator				
b.	school-based administrator				
c.	jurisdiction special services				
d.	school-based special services				
e.	counsellor				
f.	resource teacher				
g.	special education teacher				

		Position	Yes	No	DK
h.	regular class teacher				
i.	specialist teacher				
j.	parent				
k.	student(s)				
l.	other				

7. **How do persons in your school/jurisdiction learn about the existing policy?**

8. **Are the following discussed in your assessment policy?**

Indicate yes; yes but needs improvement (YNI); no; or don't know (DK) for each of the following:

		Yes	YNI	No	DK
a.	Beliefs or philosophy that guide assessment and instruction				
b.	Definition of *student with exceptional/ special needs*, or *exceptional student*				
c.	Procedures when a concern is raised:				
	· by teachers				
	· by parents or outside agency (e.g., social services, family physician)				
d.	Procedures to inform parents that their child has been referred for assessment				
e.	Guidelines that help set priorities when more students require assessment than resources permit				

STATUS OF ASSESSMENT IN YOUR SCHOOL/JURISDICTION

	Yes	YNI	No	DK
f. Policy regarding assessment planning:				
· staff involved	____	____	____	____
· policy if competent personnel are not available to do part or all of the assessment	____	____	____	____
g. Policy regarding the selection of assessment procedures	____	____	____	____
h. Policy regarding the use of a variety of assessment procedures for a comprehensive assessment	____	____	____	____
i. Policy regarding the use of valid and reliable assessment procedures	____	____	____	____
j. Guidelines regarding the types of information placed in school records	____	____	____	____
k. Policy regarding confidentiality of records:				
· who has access	____	____	____	____
· a procedure to obtain information about a student from outside parties or to release information to others	____	____	____	____
l. Guidelines for removing outdated information from records	____	____	____	____
m. Guidelines for evaluating external research requests including:				
· appropriateness of research for student participation	____	____	____	____
· ethical considerations (e.g., subject recruitment, informal consent, parents'/students' rights not to participate, access to confidential records, risks to subjects)	____	____	____	____

	Yes	YNI	No	DK
n. Guidelines for evaluating school board-initiated research projects including:				
· appropriateness of student participation	____	____	____	____
· ethical considerations (e.g., subject recruitment, informal consent, parents'/students' rights not to participate, access to confidential records, risks to subjects)	____	____	____	____

9. **Based on your responses to the questions in this chapter, do you feel that your knowledge of your school's/jurisdiction's assessment policies and procedures is adequate?**

Yes	No	DK
____	____	____

Comments

Summary

Questions in this section were designed to focus on your knowledge of current policies and procedures. If there were many responses in the DON'T KNOW column, it may be helpful to review existing policies. YES ratings, without further comment, suggest that current policy is effective. Particular attention should be given to those items rated NO or YES BUT NEEDS IMPROVEMENT. Section II of the manual will help you determine areas that need to be changed or developed.

CHAPTER 2

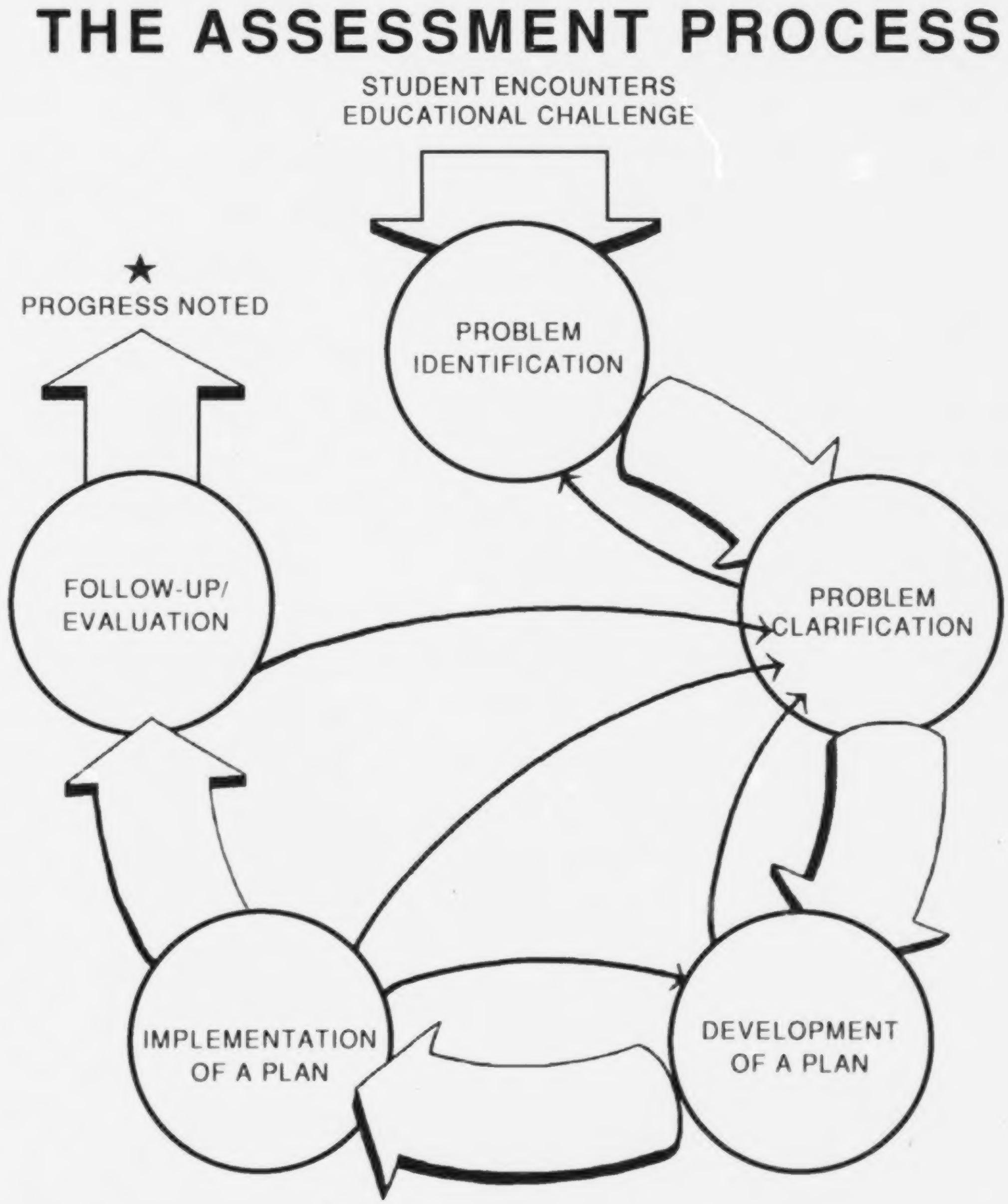
DEFINITION AND PURPOSE OF ASSESSMENT

In Chapter 1, you were asked to explain what the term *assessment* means to you. In Chapter 2, *assessment* is defined and possible purposes for assessment are described. Readers are asked to respond to vignettes and questions designed to illustrate some issues regarding, and purposes of, assessment.

Defining Assessment

Assessment is a process, not a single, finite task. It is defined here as a **process in which an issue or problem is identified, information is gathered to clarify the issue or problem, intervention strategies are developed and implemented, and the effectiveness of the intervention is evaluated**. Figure 1 illustrates this cycle. Following Figure 1 is a description of each of the steps in the cycle.

Figure 1
Assessment Process


THE ASSESSMENT PROCESS
STUDENT ENCOUNTERS EDUCATIONAL CHALLENGE
PROGRESS NOTED
PROBLEM IDENTIFICATION
FOLLOW-UP/ EVALUATION
PROBLEM CLARIFICATION
IMPLEMENTATION OF A PLAN
DEVELOPMENT OF A PLAN

As illustrated in Figure 1, there are five steps in the assessment cycle. Note that although the process is linear in that progression through the five steps occurs in a specified order, at any one of Steps 2-5 there is an option to return to one or more of the preceding steps.

The first step, *Problem Identification*, involves recognition that a student is encountering educational challenges (either having learning difficulties or excelling). Once a problem is identified, the next step is to investigate the specific reasons for (or factors contributing to) the problem (*Problem Clarification*). At this point, hypotheses are usually generated, information is gathered to prove or disprove these hypotheses, and the information is synthesized to form a conclusion. Once the reasons for (or factors contributing to) the problem have been clarified, an intervention plan can be developed (*Development of a Plan* step). In the fourth step (*Implementation of a Plan*), the plan is put into practice, usually over a pre-determined length of time. The fifth step, *Follow-up/Evaluation*, is essential in the problem-solving process. If a recommended intervention strategy was successful in addressing the problem identified at the beginning of the process, it is likely that the problem was correctly understood. If concerns still exist, however, the assessor(s) need to return to the *Problem Clarification* step and continue with further problem clarification, intervention planning and follow-up/evaluation until successful resolution is achieved. Often, multiple factors contribute to learning challenges and as improvement in one area is noted, concerns in other areas may become apparent.

The focus of this manual is the development and implementation of policies and procedures at the *Problem Identification* and *Problem Clarification* steps. It is important, however, to view these two steps as part of a total process. Issues in the assessment process will be discussed further in Section II of the manual.

Educational assessment should provide information that will answer questions about individuals or groups. While the specific purposes for assessment will vary, assessment outcomes must describe the needs of the student or group so that effective education programs can be designed (Lidz, 1991).

Although the terms *testing*, *evaluation* and *assessment* are sometimes used interchangeably, it is necessary to distinguish among them. The term *testing*, usually considered the narrowest of the three, refers to the presentation of a standard set of questions to be answered in order to obtain a test score (Mehrens & Lehmann, 1987). From an instruction standpoint, *evaluation* may be thought of as a systematic process of determining the extent to which students have achieved curriculum objectives. Thus, evaluations are conducted within the context of objectives identified for a program, course, unit or lesson (Gronlund, 1981). *Assessment* is an interpretive appraisal of performance that will provide information to enable teachers and other school personnel to make decisions regarding the students they serve (Salvia & Ysseldyke, 1985).

Assessment includes both testing and evaluation, where appropriate. The purpose of all three should be to improve programs and instruction. Often, assessments are conducted for the sole purpose of evaluating student achievement (e.g., term tests), rather than to design more effective education programs. In many cases, students assessed individually are experiencing difficulties in school. These difficulties may be related to many different problems including learning, behavior, emotional, social or physical difficulties, and health or family issues. They may also be related to the program (e.g., inappropriate placement, teaching methods or environment). An individual assessment should provide information to determine the cause of the difficulties and, more importantly, the action needed to develop effective education programs. Assessment should also identify students' strengths.

Purpose of Assessment

Specifying the purpose is the first step in effective assessment. Understanding why we want particular information leads to particular assessment strategies. When assessment strategies are not differentiated in light of the decisions to be made, inappropriate educational decisions may be made (Tindal & Marston, 1986). Some examiners have a standard battery of tests that are used regardless of the purpose of the assessment. Rather, assessment should be viewed as a problem-solving process in which questions are posed and the assessor seeks to answer these questions to make informed decisions and provide appropriate instruction (Brown & Campione, 1986).

Some authors believe that the main reason for assessment should be program planning. As Das (1987) explains, "assessment alone has limited value unless it guides intervention" (p.ix). The purposes of assessment may be further differentiated, however. Table 1 shows five purposes of assessment: *screening*, *program placement*, *program planning*, *monitoring individual or group progress*, and *program evaluation*.

Table 1
Purposes of Assessment

1. Screening Decisions	To identify students who need special attention.
2. Program Placement Decisions	To determine what environment is most appropriate for identified students; this may include assessment to determine eligibility for placement in a particular program.
3. Program Planning Decisions	To assist in the development of an education program.
4. Monitoring Individual or Group Progress	To review a student's or group of students' achievement.
5. Program Evaluation Decisions	To determine if programs have been effective.

Consider the purpose of assessment in the vignettes presented in the *Introduction* to the manual (p. 3).

Vignette 1

Administrators in XYZ School Jurisdiction want to implement a systemwide testing program to complement the information provided by the provincial achievement testing program. They are searching for testing tools to use in gathering information and are considering using group tests of language arts and mathematics achievement as well as group intelligence tests at the elementary and secondary levels.

What is the purpose of this testing program?

What are some issues to consider before undertaking this testing program?

The purpose for implementing this testing program is likely to monitor student achievement. If you are looking at evaluating group performance at the Grades 3, 6 or 9 levels, the provincial achievement testing program provides curricular-valid information that shows how well students are achieving provincial standards. However, if you require information about other grade levels, or information on an ongoing basis (provincial achievement tests are conducted once a year, but the subjects tested at each grade level are rotated on a four-year basis), then the use of standardized tests may accomplish that goal.

However, there are numerous issues to consider in choosing and interpreting standardized tests. These are discussed further in Chapter 7 (pp. 139-156). The reasons for giving a group intelligence test are unclear -- group intelligence tests will not provide information about student achievement. Before proceeding with this program, it is important to carefully consider the types of information the assessors wish to gather and the types of information that specific tests are designed to provide.

This vignette raises several other issues that relate to assessment planning and policy:

- Have the purposes of this evaluation been made explicit to all involved: principal, teachers, parents and students?
- Have all concerned parties been involved in the evaluation process?
- Who will have input into planning the testing program?
- Who will do the testing?
- What types of assessment will be done?
- How will the results be used?
- Will there be follow-up on students who perform poorly or who excel?
- What will be done if students in one class or school perform significantly better or worse than the others?

Each of these questions will be discussed in Section II. They are raised here to indicate some of the issues that need to be considered in the assessment process.

Vignette 2

Administrators of Alphabet School Jurisdiction are concerned about the large numbers of students who appear to be encountering great difficulty in their first year of school. The teachers feel that many of these students are "just not ready for school." The administrators and teachers are interested in finding out more about the students and their educational progress.

DEFINITION AND PURPOSE OF ASSESSMENT

What is the purpose of this assessment?

Discuss some of the issues that need to be considered before doing such an assessment.

Assessment in this situation could be for two different purposes. The particular purpose will determine the procedures chosen for the assessment. One purpose might be screening -- the jurisdiction might decide to assess all children entering school to ascertain school readiness. **Note: Screening for school readiness is a controversial practice and caution is advised.** If screening is being considered, the reader should be aware of the following concerns:

- High false positive and negative rates. Sometimes students identified as at-risk for school failure will not, in fact, encounter difficulty in school. Likewise, others will not be identified as at-risk and will later encounter difficulty.

- Identifying students as at-risk before school entry may result in a self-fulfilling prophecy effect. If screening programs are implemented, great care must be taken to explain the process to teachers and families and to discourage labelling of students. Students' strengths, not deficiencies, should be emphasized.

- If resources are unavailable for follow-up, should a screening program be implemented? Some parents and educators express concern that if nothing can be done about a problem, what is the point in identifying it? The issue is not quite this simple and warrants in-depth discussion and consideration in assessment policies.

Issues to be addressed before implementing a screening program are similar to those presented for **Vignette 1**.

- Who will have input into designing the screening program?
- Who will do the testing?
- When and where will the testing be done?
- How will the results be used?
- Will there be follow-up on students who perform poorly or who excel?

A second possible purpose for assessment in the above vignette is to assist in making program planning decisions. Information is collected to help teachers plan programs to meet the needs of all students in their classes who may not have all of the readiness skills required for success.

Issues to be addressed before implementing an assessment for program planning purposes include:

- Who will be referred for assessment?
- Who will have input into the assessment program?
- Who will do the assessment?
- What assessment procedures will be used?
- How will the results be used?
- Will there be follow-up to determine whether the program modifications are effective?

Vignette 3

Four students in Mr. Green's class repeatedly exceed curriculum expectations. He has given them enrichment activities and opportunities to tutor other students, but can't seem to keep them interested. He is concerned that they are bored. He would like to collect information to assist in making program placement and program planning decisions.

What is the purpose of this assessment?

____

____

____

Discuss some of the issues that need to be considered before proceeding.

____

____

____

There are two possible reasons for assessing the students identified by Mr. Green. The first would be to determine if they are in an appropriate program -- a program placement decision. Can this class meet the particular needs of these students? Would modifications in this class, or placement in another class or a special program better meet their needs? A second reason for assessment would be help with program planning decisions. What type of education program will meet the unique needs of each of these students? In practice, assessment may provide information for both purposes. Program planning information will assist in determining the most appropriate placement.

Issues to consider in this vignette include:

- Should the assessment involve just the four identified students or the whole class?
- If a decision is made to individually assess the identified students, how will parents be informed? What will happen if any parents refuse to allow their children to be assessed?
- Who will have input into the assessment process: teachers, specialists, parents?
- Who will do the assessment?
- What assessment procedures will be used?
- How will results of the assessment be used?
- Will there be follow-up to determine whether the program modifications are effective?
- Should the assessment be done if there are no resources to implement the recommendations?

Vignette 4

Johnny, age 13, has just transferred to the school jurisdiction as he has moved to a new foster home, his fifth in three years. Past school records are very sketchy. The principal and teacher wonder what skills and knowledge Johnny has already acquired.

What is the purpose of this assessment?

____

____

____

Discuss some of the issues to consider when planning the assessment.

____

____

____

The purpose of assessment in this situation would be program placement -- identification of the type of program Johnny needs. If, during the course of gathering information to determine program placement, there is evidence to suggest that extra support is needed, then the purpose might also include program planning.

The main issue to consider in this vignette is that the purpose of assessment is clear to all involved, including Johnny. Because he has moved so often, he may have been repeatedly assessed and may, therefore, be wary of any type of assessment. In addition, the frequent moves may have resulted in gaps in his education.

Other issues to consider include:

- Who will have input into the assessment: Johnny, family members, social worker, previous teachers?
- Who will do the assessment?
- What type of assessment will be done, informal or formal?

Summary

Assessment is **a process in which an issue or problem is identified, information is gathered to clarify the issue or problem, intervention strategies are developed and implemented, and the effectiveness of the intervention is evaluated.** The reasons for assessment include:

- screening decisions,
- program placement decisions,
- program planning decisions,
- monitoring individual and group progress, and
- program evaluation decisions.

Identifying the specific purpose of an assessment is the first step in the assessment process. The purposes of assessment in the vignettes presented in this chapter varied. For each vignette, there are issues to consider and decisions to be made to ensure that the information gathered through the assessment will answer the questions of interest.

Issues raised include the following:

- Communication, to all concerned parties, of the purpose(s) of assessment.
- Communication, to all concerned parties, of the assessment process.
- Assessing students when there are limited or no resources available to implement the recommendations.
- Assessing incoming students to predict potential school performance.
- Assessing students whose education history is discontinuous.

Decisions were made regarding the following:

- Who will be referred for assessment.
- Who will have input into the assessment process.
- Who will be involved in the assessment.
- What types of assessment will be done.
- How assessment results will be used.
- Whether the effectiveness of decisions based on recommendations from the assesment will be evaluated.

These issues and decisions will be discussed further in Section II (Chapters 4-8), *Issues to Consider in Assessment*.

CHAPTER 3

WORKING THROUGH THE ASSESSMENT PROCESS

In this chapter, you will have an opportunity to work through the assessment process. Two vignettes are presented: one requiring individual assessment of two students, the other a group assessment. Questions and possible responses are provided to guide you through the alternatives. Where appropriate, further information is provided, as well as references to parts of the manual that provide further information on the topics/issues being considered. You may find it helpful to complete these exercises individually and then discuss and compare your responses with others in a group exercise.

Individual Assessment

Consider the following vignette:

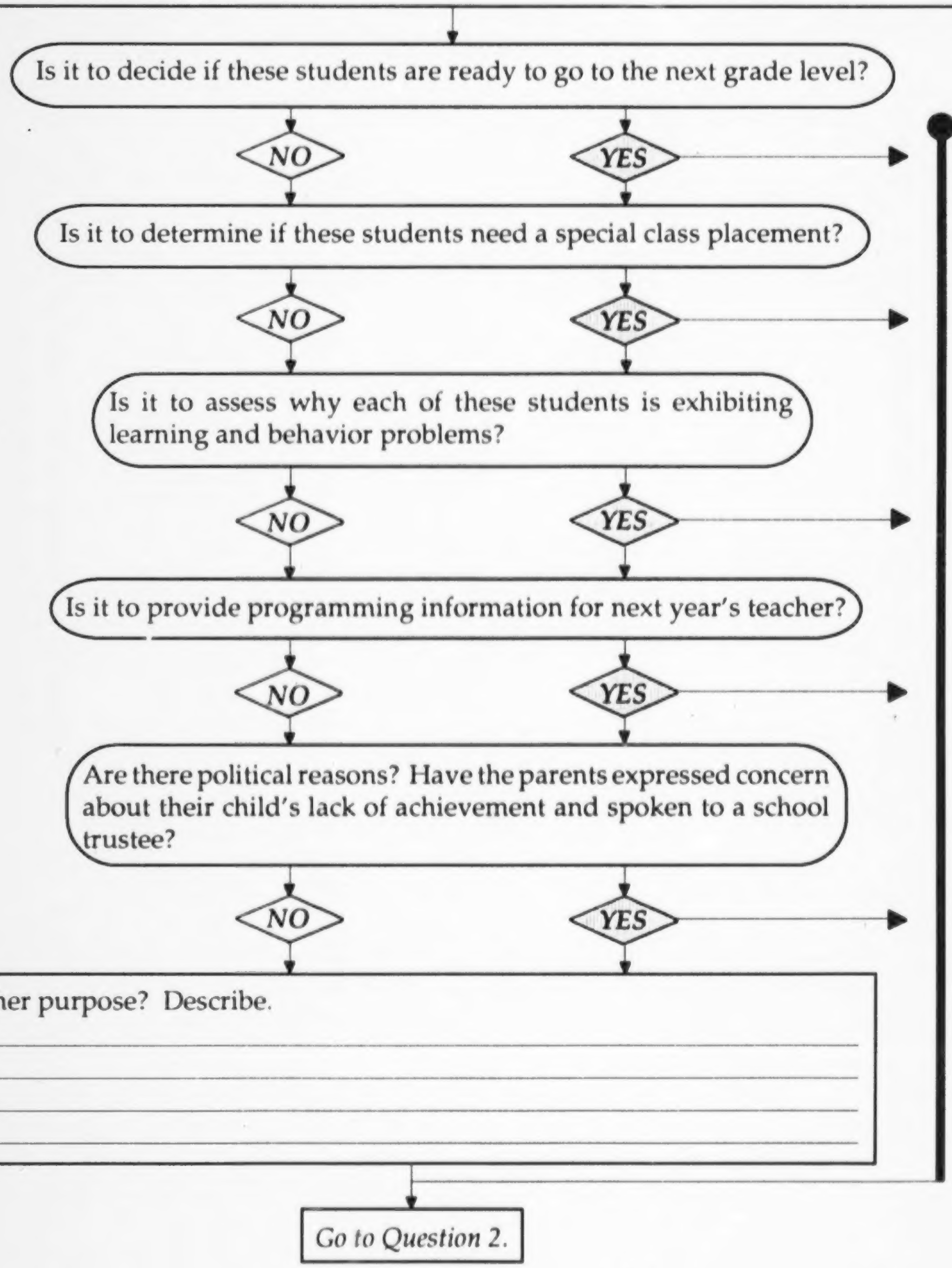
> Two students in an elementary class appear to be underachieving (poor reading and writing skills, behind in math) and are exhibiting disruptive behavior (hard to keep on task and topic, talking out of turn, hitting other students and generally inattentive). It is May and the teacher is concerned about placement for the coming year. She requests an assessment of these students.

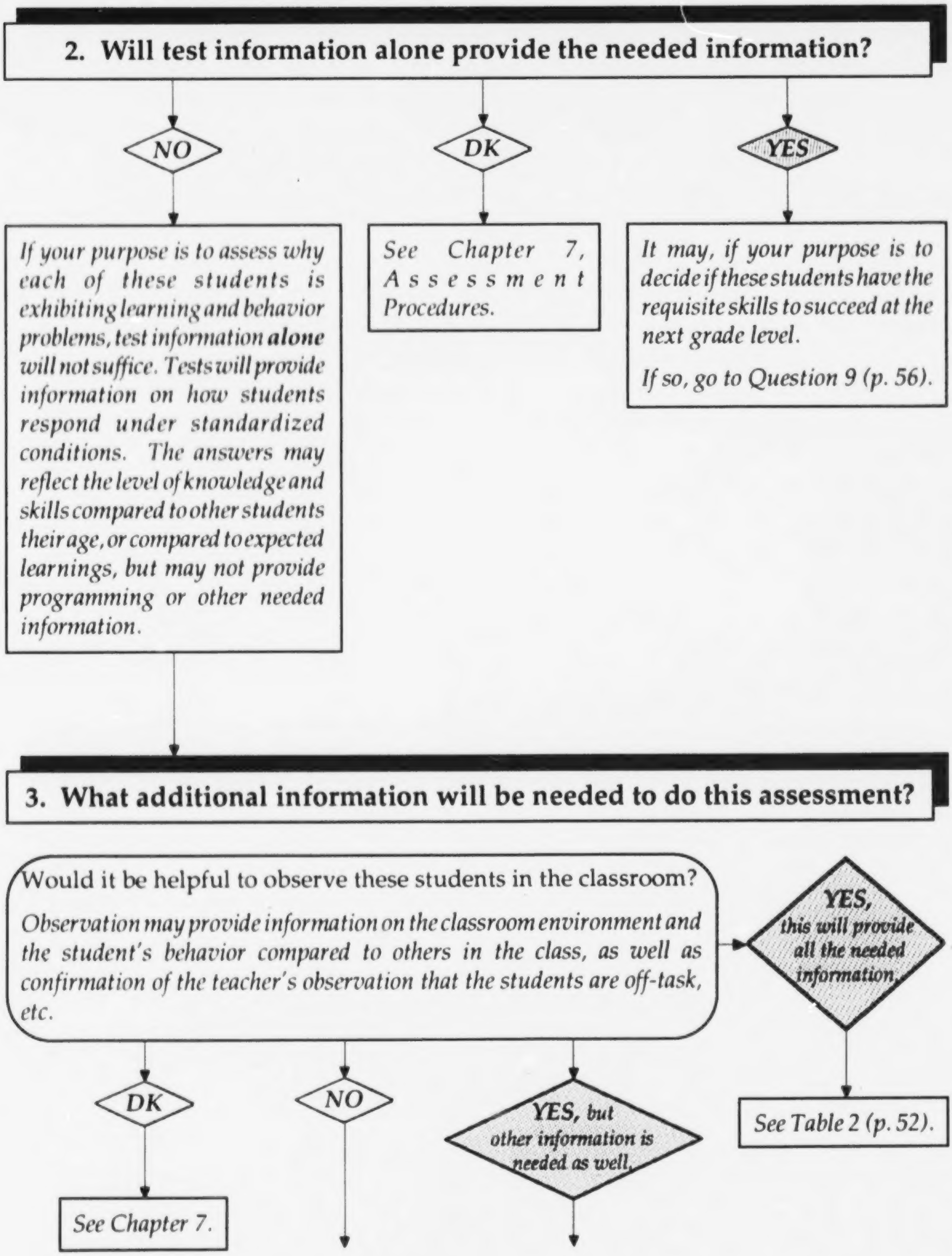
Briefly describe what you think should be done.

The following steps will help you work through the individual assessment process.

1. What is the purpose of this assessment?

Consider the purpose carefully. The purposes provided below are not mutually exclusive. The purpose will determine, in part, what will be done next. (See Chapter 2 for a discussion of purposes of assessment.)


Is it to decide if these students are ready to go to the next grade level?
NO
YES
Is it to determine if these students need a special class placement?
NO
YES
Is it to assess why each of these students is exhibiting learning and behavior problems?
NO
YES
Is it to provide programming information for next year's teacher?
NO
YES
Are there political reasons? Have the parents expressed concern about their child's lack of achievement and spoken to a school trustee?
NO
YES
Other purpose? Describe.
Go to Question 2.



2. Will test information alone provide the needed information?

If your purpose is to assess why each of these students is exhibiting learning and behavior problems, test information ***alone*** *will not suffice. Tests will provide information on how students respond under standardized conditions. The answers may reflect the level of knowledge and skills compared to other students their age, or compared to expected learnings, but may not provide programming or other needed information.*

See Chapter 7, Assessment Procedures.

It may, if your purpose is to decide if these students have the requisite skills to succeed at the next grade level.

If so, go to Question 9 (p. 56).

3. What additional information will be needed to do this assessment?

Would it be helpful to observe these students in the classroom?

Observation may provide information on the classroom environment and the student's behavior compared to others in the class, as well as confirmation of the teacher's observation that the students are off-task, etc.

YES, this will provide all the needed information.
DK
NO
YES, but other information is needed as well.

See Table 2 (p. 52).

See Chapter 7.

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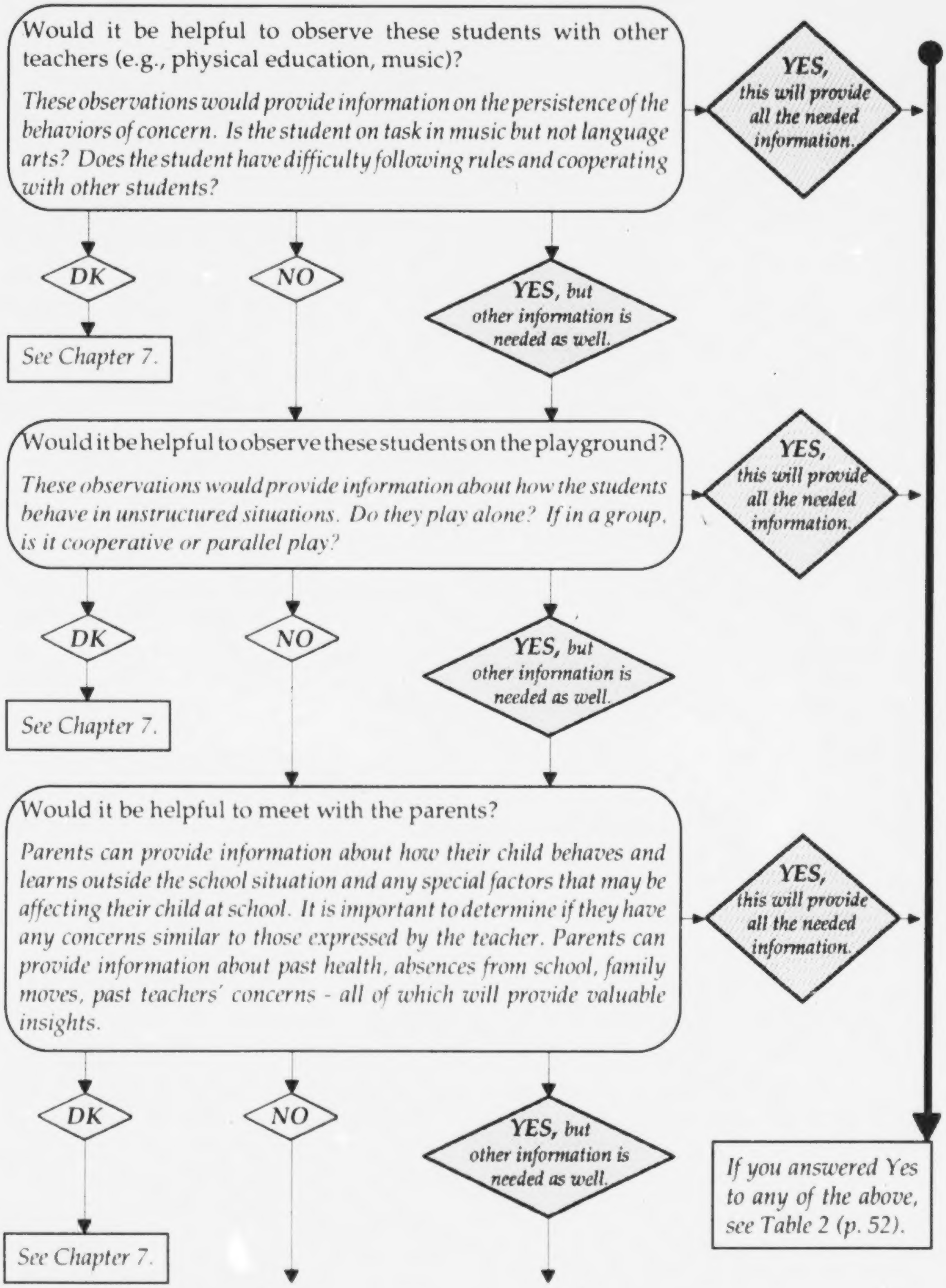


Would it be helpful to observe these students with other teachers (e.g., physical education, music)?

These observations would provide information on the persistence of the behaviors of concern. Is the student on task in music but not language arts? Does the student have difficulty following rules and cooperating with other students?

Would it be helpful to observe these students on the playground?

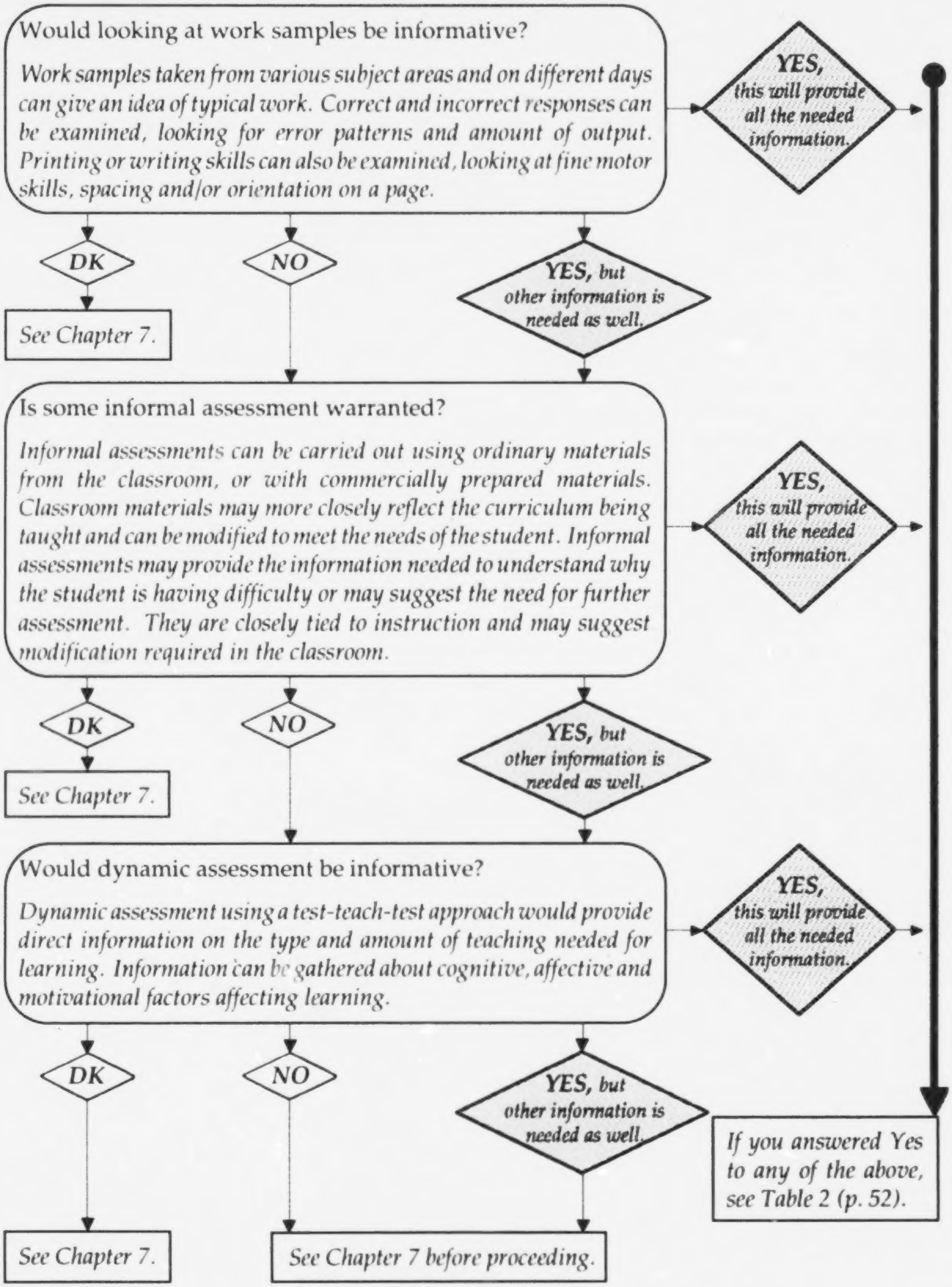
These observations would provide information about how the students behave in unstructured situations. Do they play alone? If in a group, is it cooperative or parallel play?

Would it be helpful to meet with the parents?

Parents can provide information about how their child behaves and learns outside the school situation and any special factors that may be affecting their child at school. It is important to determine if they have any concerns similar to those expressed by the teacher. Parents can provide information about past health, absences from school, family moves, past teachers' concerns - all of which will provide valuable insights.

If you answered Yes to any of the above, see Table 2 (p. 52).

YES, this will provide all the needed information.
DK
NO
YES, but other information is needed as well.
See Chapter 7.
YES, this will provide all the needed information.
DK
NO
YES, but other information is needed as well.
See Chapter 7.
YES, this will provide all the needed information.
DK
NO
YES, but other information is needed as well.
See Chapter 7.



Would looking at work samples be informative?

Work samples taken from various subject areas and on different days can give an idea of typical work. Correct and incorrect responses can be examined, looking for error patterns and amount of output. Printing or writing skills can also be examined, looking at fine motor skills, spacing and/or orientation on a page.

Is some informal assessment warranted?

Informal assessments can be carried out using ordinary materials from the classroom, or with commercially prepared materials. Classroom materials may more closely reflect the curriculum being taught and can be modified to meet the needs of the student. Informal assessments may provide the information needed to understand why the student is having difficulty or may suggest the need for further assessment. They are closely tied to instruction and may suggest modification required in the classroom.

Would dynamic assessment be informative?

Dynamic assessment using a test-teach-test approach would provide direct information on the type and amount of teaching needed for learning. Information can be gathered about cognitive, affective and motivational factors affecting learning.

If you answered Yes to any of the above, see Table 2 (p. 52).

YES, this will provide all the needed information.
DK
NO
YES, but other information is needed as well.
See Chapter 7.
YES, this will provide all the needed information.
DK
NO
YES, but other information is needed as well.
See Chapter 7.
YES, this will provide all the needed information.
DK
NO
YES, but other information is needed as well.
See Chapter 7.
See Chapter 7 before proceeding.

Table 2
Information Gathered Prior to Referral

Student A

The observations suggest that Student A has difficulty staying on task in all his classes. He has difficulty in physical education waiting for his turn and cooperating with other students. When he does not get what he wants, he will stomp off to the side or pick up a ball and throw it across the field. During recess he tries to play with other students but they reject him. He constantly pokes other students, trips them or accidentally hurts them. He appears remorseful immediately after. In an interview he tells you that the other kids do not like him and he does not have any friends. His parents report that he plays by himself a lot and can be very irritating to others. They indicate that he has always been a very active child. Work samples are sparse. He appears to complete few assignments and to produce very little. His stories in creative writing are short and poorly organized. When you ask him to dictate a story he talks extensively, has lots of ideas but seems to be continually distracted by a new idea. For example, he is telling you a story about a boy who wanted to be an astronaut and go to the moon. The moon then reminds him of camping with his family last summer and seeing the moon which in turn, reminds him that there will be a new moon tonight, etc., etc..

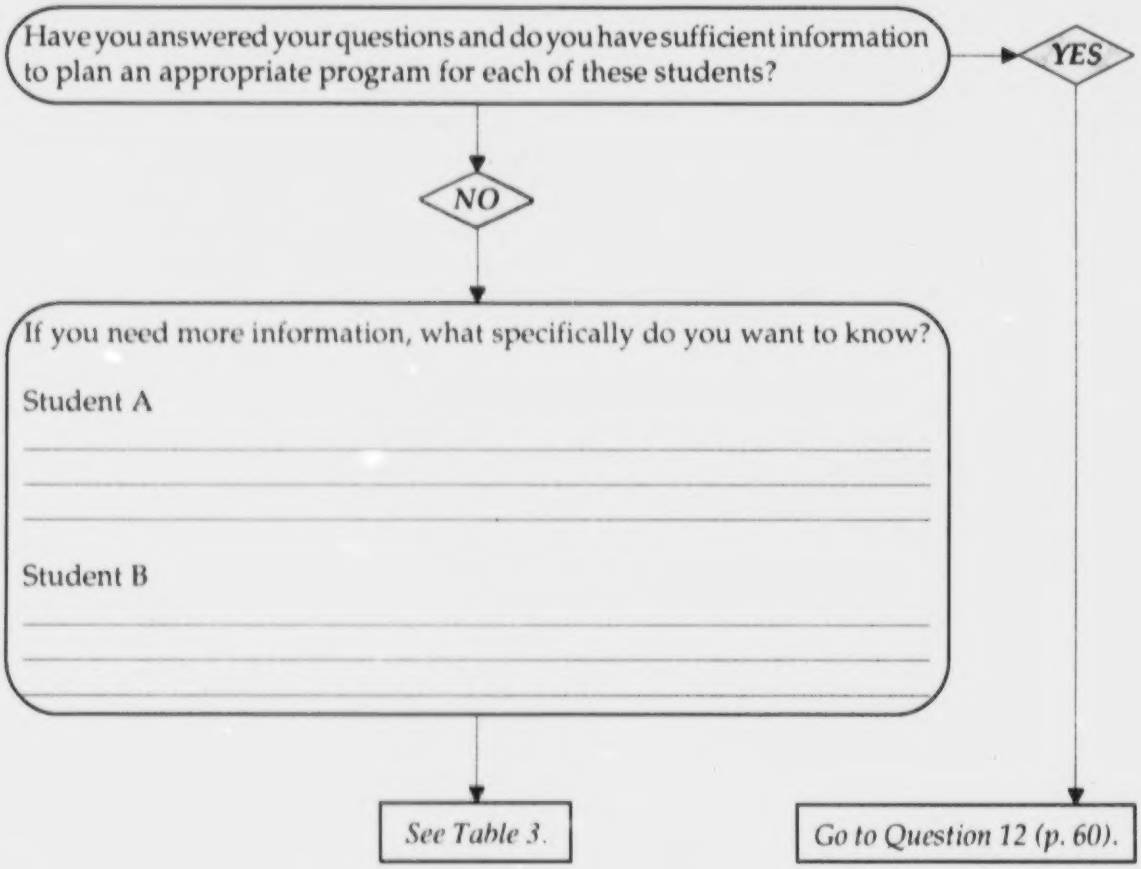
Student B

Student B appears to be off-task in language arts and math. He gets out of his seat a lot, talks to other students, plays with a little car and shreds his eraser. In music and physical education, his behavior is very different. He is attentive, cooperative and appears to genuinely enjoy both classes. The teachers in those classes do not consider him a problem. On the playground, he is observed playing ball with a small group of boys. He appears to be an accepted part of the group, laughing and joking with them. Parents report that he is a happy, active student. He loves to be read to but seldom reads on his own. Work samples from language arts indicate extremely large and poorly formed handwriting, and poor spelling. The few math problems completed are done correctly but numbers are reversed and poorly spaced. He indicates that he does not like to read but wishes he could read a book about baseball because it is his favourite sport. He has trouble recognizing words when reading. However, he has no problem responding to questions about a story he has heard. In fact, he enjoys class discussions and has an above average listening-speaking vocabulary. During social studies and science discussions, he is inquisitive and often volunteers answers. The writing curriculum calls for a shift from manuscript to cursive writing. Student B has resisted making this change. Written work is painstakingly slow, taking much effort. The final product is often illegible and sloppy (many erasures and cross-outs).

4. From the information presented in Table 2, what would you do next?

Student A

Student B



Have you answered your questions and do you have sufficient information to plan an appropriate program for each of these students?

If you need more information, what specifically do you want to know?

Student A

Student B

See Table 3.

Go to Question 12 (p. 60).

Table 3
Sample Questions

Student A

1. Are there particular types of problem behavior?
2. Do they occur in some settings more than others?
3. Do parents observe similar behaviors to those observed in the school?
4. Are there physical concerns underlying the difficulties?

Student B

1. Have modifications been made in the classroom to increase productivity?
2. Are the problems in math due to a lack of knowledge and skills in mathematics or due to the written requirements?
3. Will the amount of reading done increase if books are provided on topics of interest (eg., baseball)?

5. How will this information be gathered?

School-based personnel

Refer to someone else for further assessment.

6. What assessment procedures would you use to answer the questions in Table 3?

Student A

Student B

See Table 4.

Go to Question 8 (p. 56).

Table 4
Possible Ways to Gather Information

Student A

The resource teacher or psychologist (or other, e.g., principal) might do a structured observation targeting one or two specific behaviors, recorded in terms of frequency, magnitude and duration across several settings (e.g., How often does he poke other students during gym class?).

Parents and teachers could be asked to fill out a behavior rating scale (e.g., *Connor's Parent-Teacher Questionnaire*) to assess if restless, inattentive behaviors are characteristic of this student and are observed both at home and at school.

A referral to the family physician for a complete physical checkup to assess the student's general health may be helpful.

Student B

The classroom teacher might modify assignments (e.g., answer only half the questions on a worksheet, dictate a story onto a tape, provide specific timelines) to see if the student has the skills and knowledge but is overwhelmed by the amount of work.

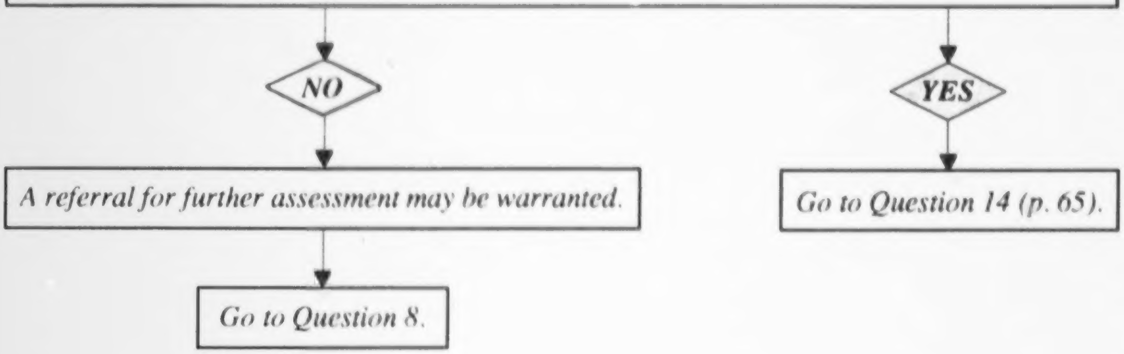
Informal dynamic assessment of the approach and strategies being used in math will indicate what the student is doing or not doing that is helpful.

Decreasing the written demands in math assignments will permit observation of skills and knowledge.

Providing books of specific interest during reading period and monitoring interest, attention and amount of reading will provide preliminary information on whether the difficulty is due to motivation or skills.

A referral to a vision specialist will rule out visual problems such as the need for corrective lenses.

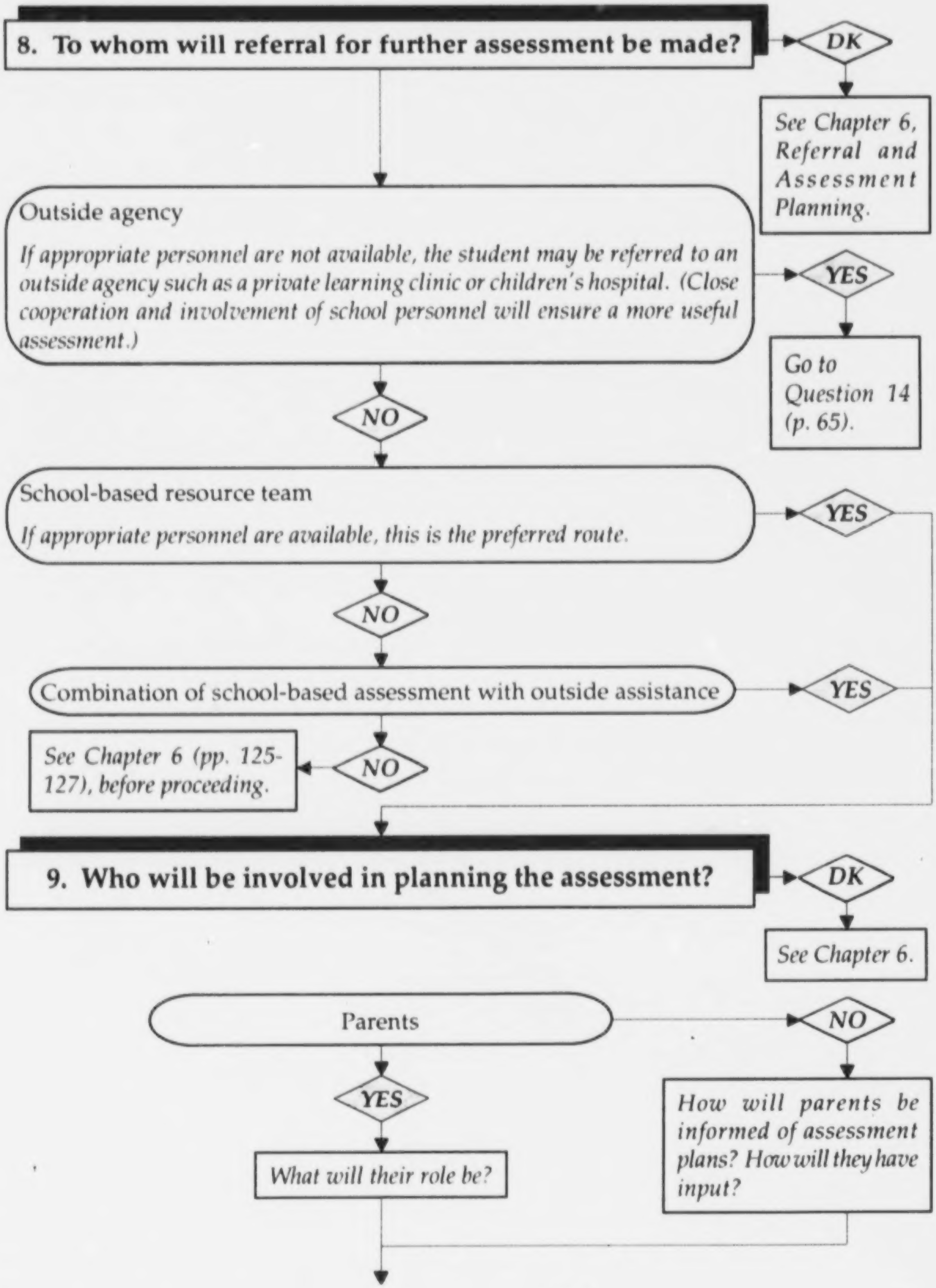
7. Is the information in Table 4 sufficient to understand the needs of these students?



A referral for further assessment may be warranted.

Go to Question 8.

Go to Question 14 (p. 65).



8. To whom will referral for further assessment be made?

See Chapter 6, Referral and Assessment Planning.

Outside agency

If appropriate personnel are not available, the student may be referred to an outside agency such as a private learning clinic or children's hospital. (Close cooperation and involvement of school personnel will ensure a more useful assessment.)

Go to Question 14 (p. 65).

School-based resource team

If appropriate personnel are available, this is the preferred route.

Combination of school-based assessment with outside assistance

See Chapter 6 (pp. 125-127), before proceeding.

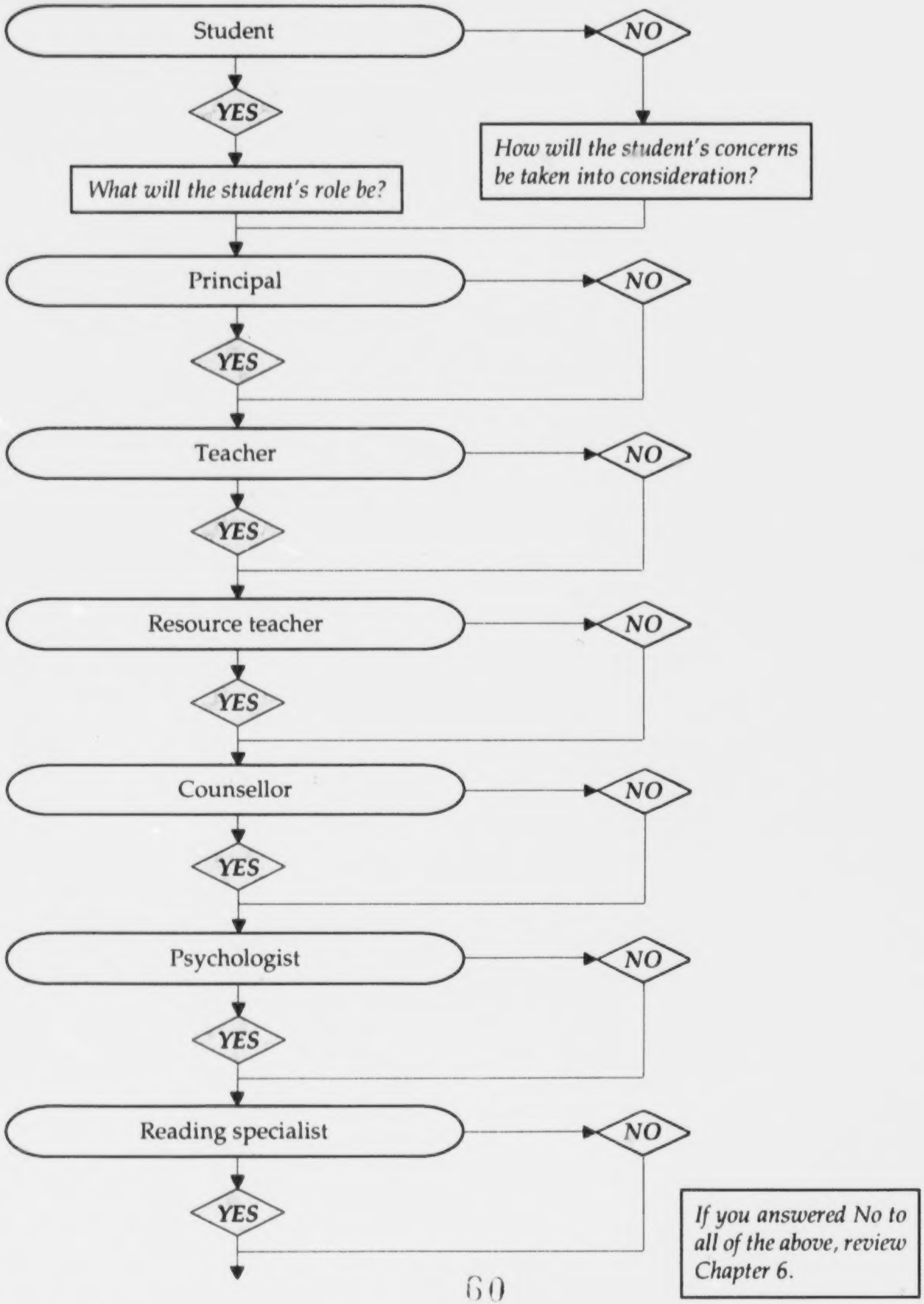
9. Who will be involved in planning the assessment?

See Chapter 6.

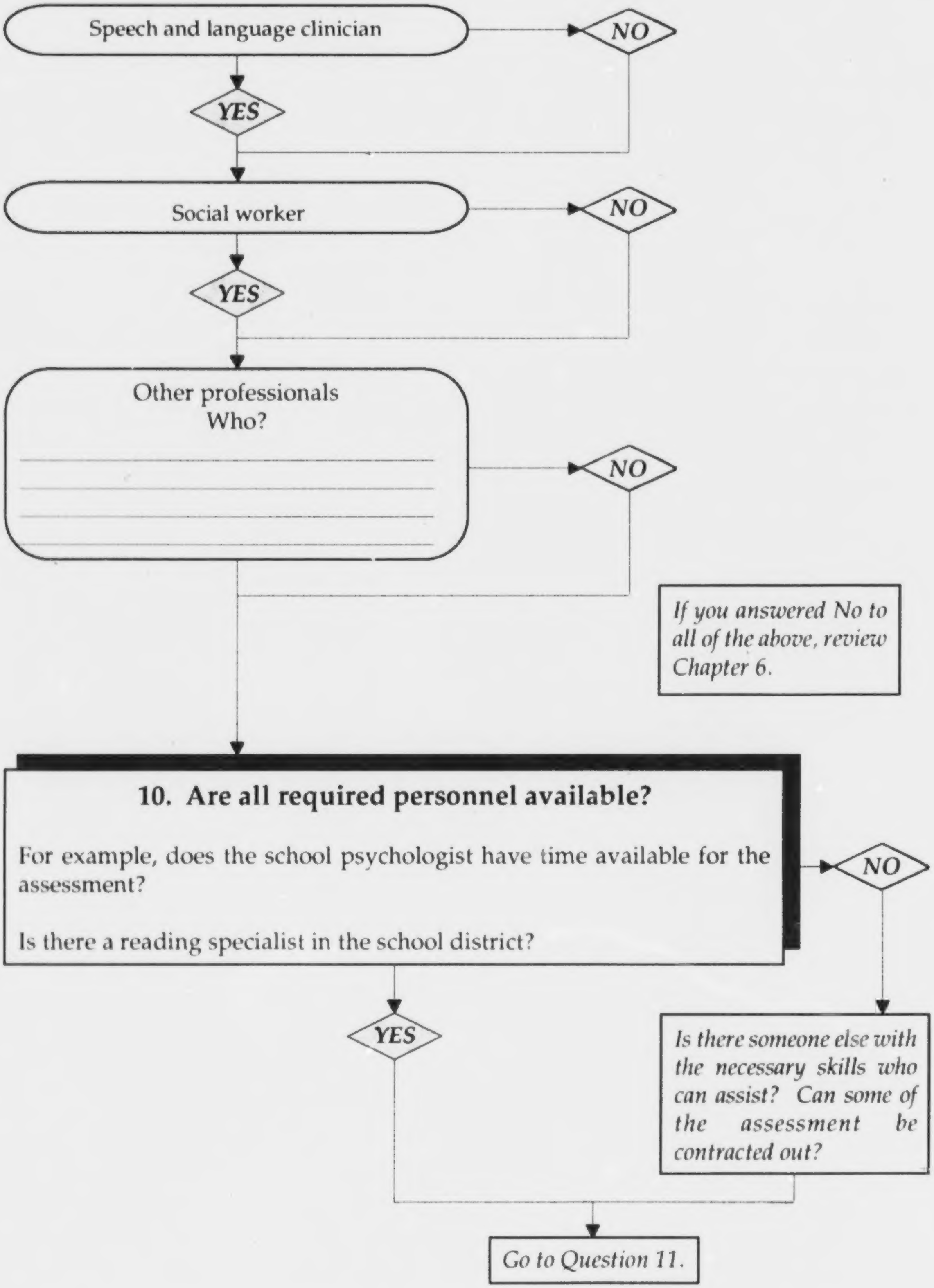
Parents

What will their role be?

How will parents be informed of assessment plans? How will they have input?


Student
NO
YES
How will the student's concerns be taken into consideration?
What will the student's role be?
Principal
NO
YES
Teacher
NO
YES
Resource teacher
NO
YES
Counsellor
NO
YES
Psychologist
NO
YES
Reading specialist
NO
YES

If you answered No to all of the above, review Chapter 6.



Speech and language clinician

Social worker

Other professionals
Who?

If you answered No to all of the above, review Chapter 6.

10. Are all required personnel available?

For example, does the school psychologist have time available for the assessment?

Is there a reading specialist in the school district?

Is there someone else with the necessary skills who can assist? Can some of the assessment be contracted out?

Go to Question 11.

11. What additional questions might be considered for each student before beginning further assessment?

Student A

Student B

See Table 5, then go to Question 12.

Table 5
Possible Questions

Student A

1. Are there specific cognitive factors underlying Student A's difficulties?
2. What learning strategies is A using and what does he understand about metacognition?
3. Are there difficulties with social skills?
4. What is the overall level of academic achievement?

Student B

1. What skills and strategies is B using in reading?
2. What is B's level of motor skills?
3. What is the overall level of academic achievement?

12. Using the questions suggested in Table 5 and any others you would like to add, consider the assessment procedures you might use and the personnel involved. See Chapter 7 for discussion of assessment procedures.

Student A:
Are there specific cognitive factors underlying Student A's difficulties?

Assessment Procedures	Personnel

What learning strategies is A using and what does he understand about metacognition?

Assessment Procedures	Personnel

Are there difficulties with social skills?

Assessment Procedures	Personnel

What is the overall level of academic achievement?

Assessment Procedures	Personnel

↓

Other questions? ______________________________

Assessment Procedures	Personnel

↓

Student B:
What skills and strategies is B using in reading?

Assessment Procedures	Personnel

↓

What is B's level of motor skills?

Assessment Procedures	Personnel

↓

What is the overall level of academic achievement?

Assessment Procedures	Personnel

Other questions? ____________________

Assessment Procedures	Personnel

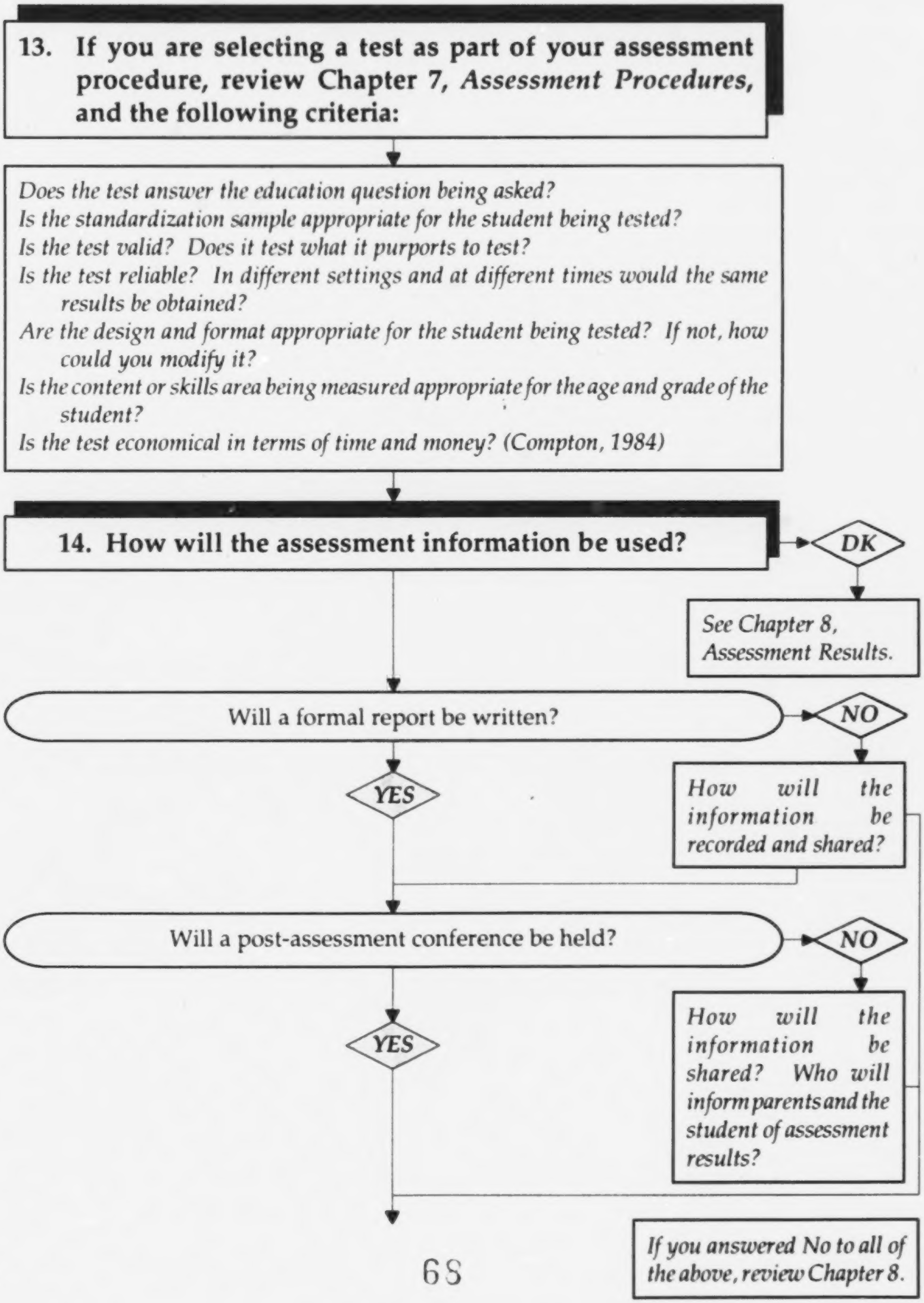
See Tables 6a and 6b, then go to Question 13.

Table 6a
Student A: Possible Assessment Procedures and Personnel

Assessment Procedures	Personnel
1. Are there specific cognitive factors underlying Student A's difficulties?	
Formal standardized test The information collected before this meeting suggests that A may have difficulties with attention. Particular patterns of strengths and weaknesses on the WISC-III may be indicative of attention deficits. Other tests that require selective and sustained attention will also provide information.	Psychologist
Dynamic Assessment Feuerstein's Learning Potential Assessment device also provides specific information about areas of deficient cognitive functioning in students with learning difficulties (Samuels, Tzuriel & Malloy-Miller, 1989).	Psychologist Counsellor Resource teacher
2. What learning strategies is A using and what does he understand about metacognition?	
Formal and informal tests An appraisal of how A is approaching tasks, what he does when trying to solve a problem or memorize something will provide important information to understand what he may be doing in class. There are commercial tests available (both formal and informal) that assess learning strategies as well as informal dynamic approaches that can be used.	Resource teacher Teacher
3. Are there difficulties with social skills?	
Observation, Interview, Checklist Rating Scales Given reported difficulties with friendships and social relationships generally, it might be helpful to ascertain the level of social skills.	Psychologist Resource teacher
4. What is the overall level of academic achievement?	
Formal Test To get a picture of how A is functioning relative to other students his age and to ascertain if there are particular academic areas that are deficient and/or at grade level, measures of academic achievement might be given.	Resource teachers

Table 6b
Student B: Possible Assessment Procedures and Personnel

Assessment Procedures	**Personnel**
1. What skills and strategies is B using in reading?	
Formal and Informal Tests The information collected before the meeting suggests that B is having particular difficulties in the language arts areas. Further investigation using both formal and informal tests of various aspects of reading will reveal areas of strength and weakness in reading.	Resource teacher Reading clinician
2. What is B's level of motor skills?	
Formal and Informal Tests There is information to suggest that handwriting is a problem for B. Tests of sensorimotor integration and handwriting skills will uncover specific difficulties.	Occupational therapist
3. What is the overall level of academic achievement?	
Formal Test As for A, measures of academic achievement might be given to see how B is functioning relative to other students his age and to ascertain if there are particular academic areas that are deficient and/or grade level.	Resource teacher



13. If you are selecting a test as part of your assessment procedure, review Chapter 7, *Assessment Procedures*, and the following criteria:

Does the test answer the education question being asked?
Is the standardization sample appropriate for the student being tested?
Is the test valid? Does it test what it purports to test?
Is the test reliable? In different settings and at different times would the same results be obtained?
Are the design and format appropriate for the student being tested? If not, how could you modify it?
Is the content or skills area being measured appropriate for the age and grade of the student?
Is the test economical in terms of time and money? (Compton, 1984)

14. How will the assessment information be used?

See Chapter 8, Assessment Results.

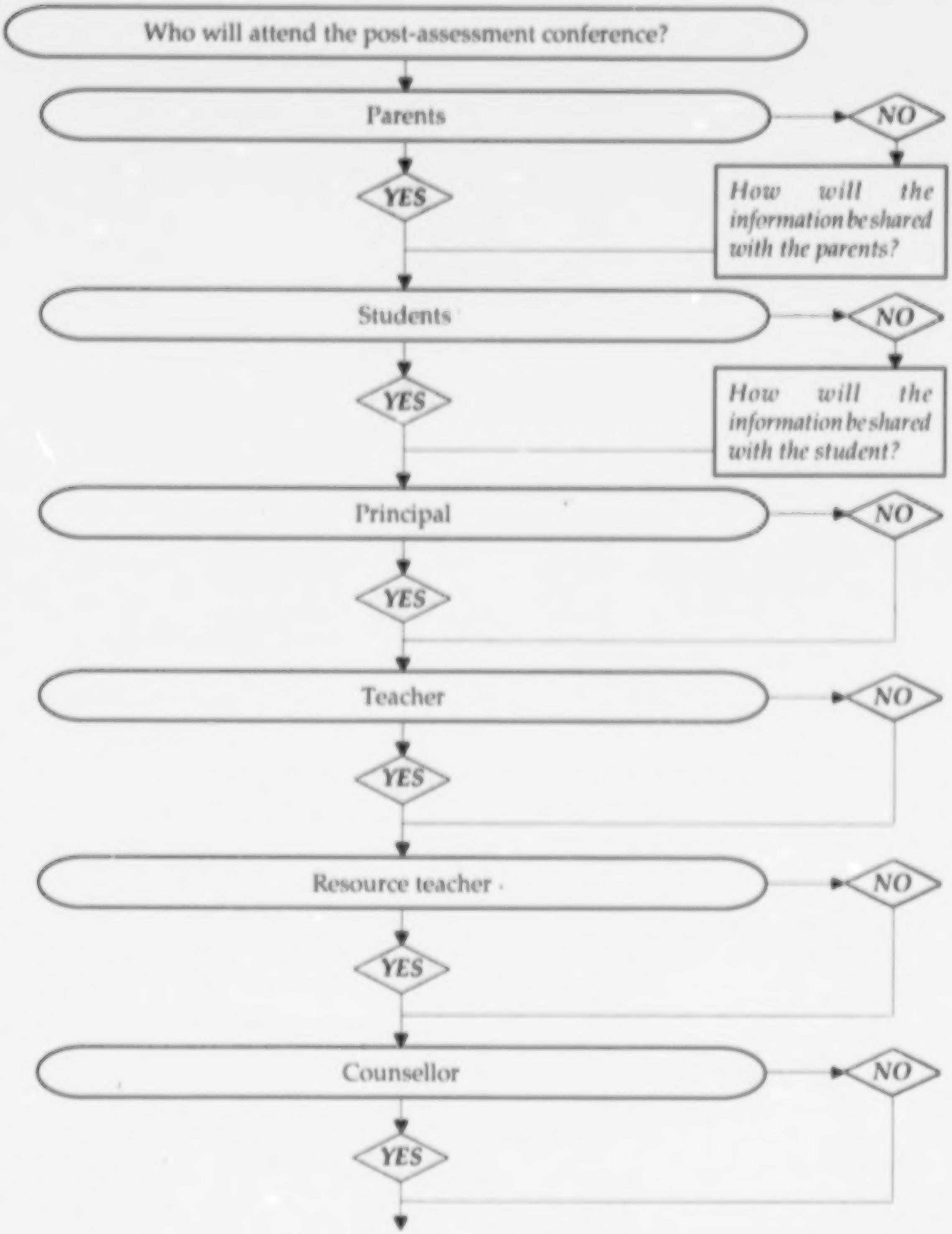
Will a formal report be written?

How will the information be recorded and shared?

Will a post-assessment conference be held?

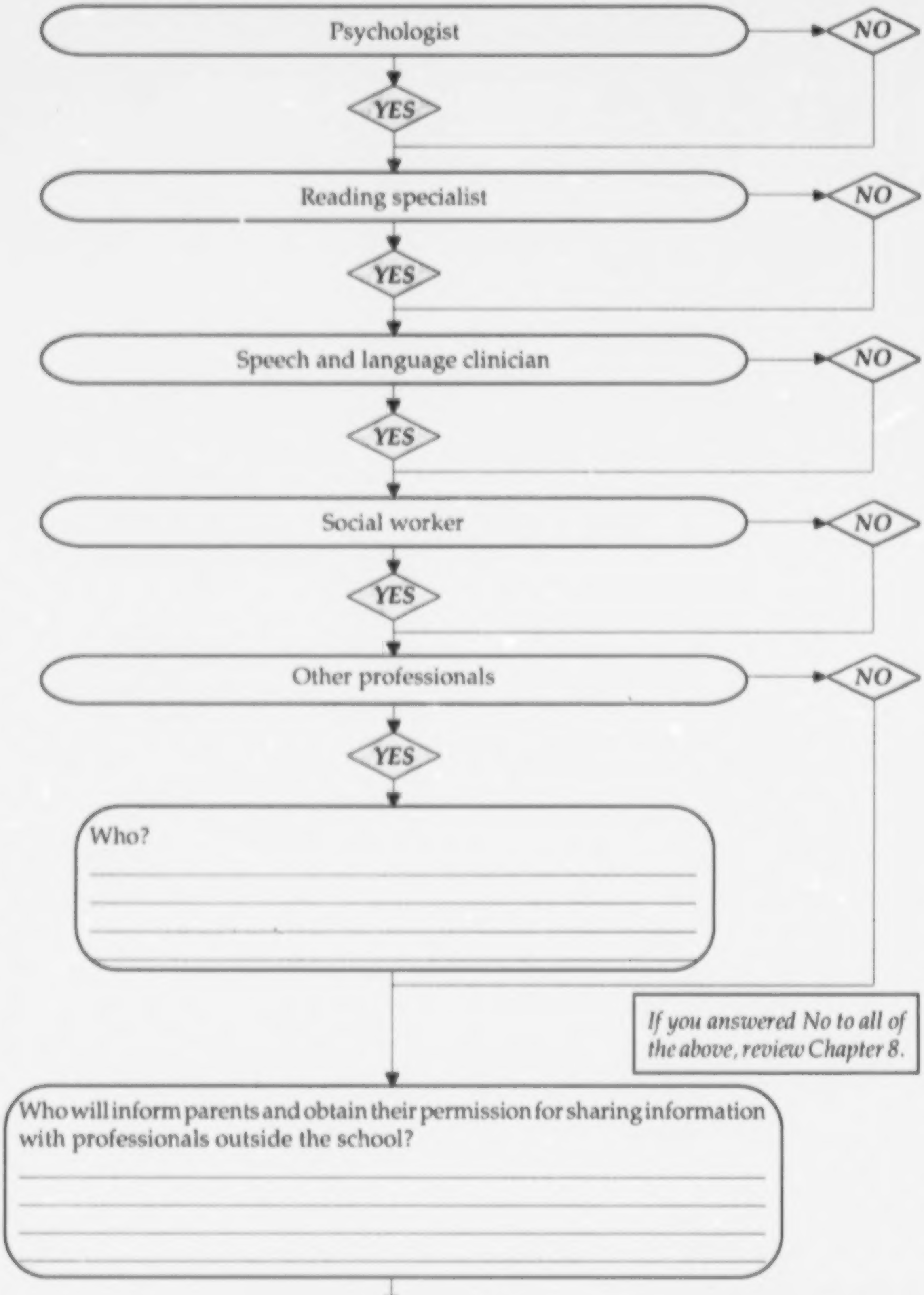
How will the information be shared? Who will inform parents and the student of assessment results?

If you answered No to all of the above, review Chapter 8.


Who will attend the post-assessment conference?
Parents
NO
How will the information be shared with the parents?
YES
Students
NO
How will the information be shared with the student?
YES
Principal
NO
YES
Teacher
NO
YES
Resource teacher
NO
YES
Counsellor
NO
YES

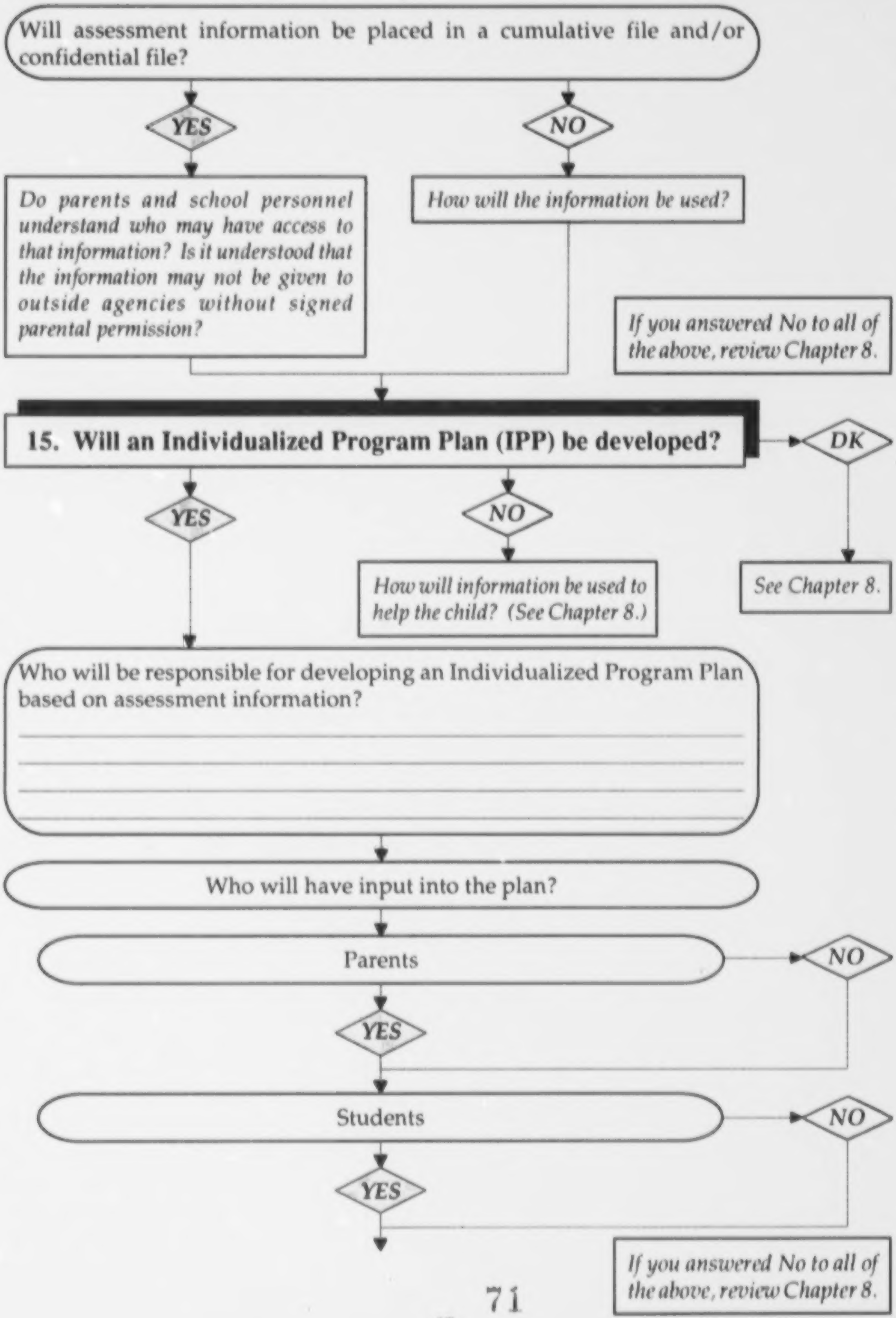
If you answered No to all of the above, review Chapter 8.

WORKING THROUGH THE ASSESSMENT PROCESS


Psychologist
YES
NO
Reading specialist
YES
NO
Speech and language clinician
YES
NO
Social worker
YES
NO
Other professionals
YES
NO
Who?

If you answered No to all of the above, review Chapter 8.

Who will inform parents and obtain their permission for sharing information with professionals outside the school?



Will assessment information be placed in a cumulative file and/or confidential file?

Do parents and school personnel understand who may have access to that information? Is it understood that the information may not be given to outside agencies without signed parental permission?

How will the information be used?

If you answered No to all of the above, review Chapter 8.

15. Will an Individualized Program Plan (IPP) be developed?

How will information be used to help the child? (See Chapter 8.)

See Chapter 8.

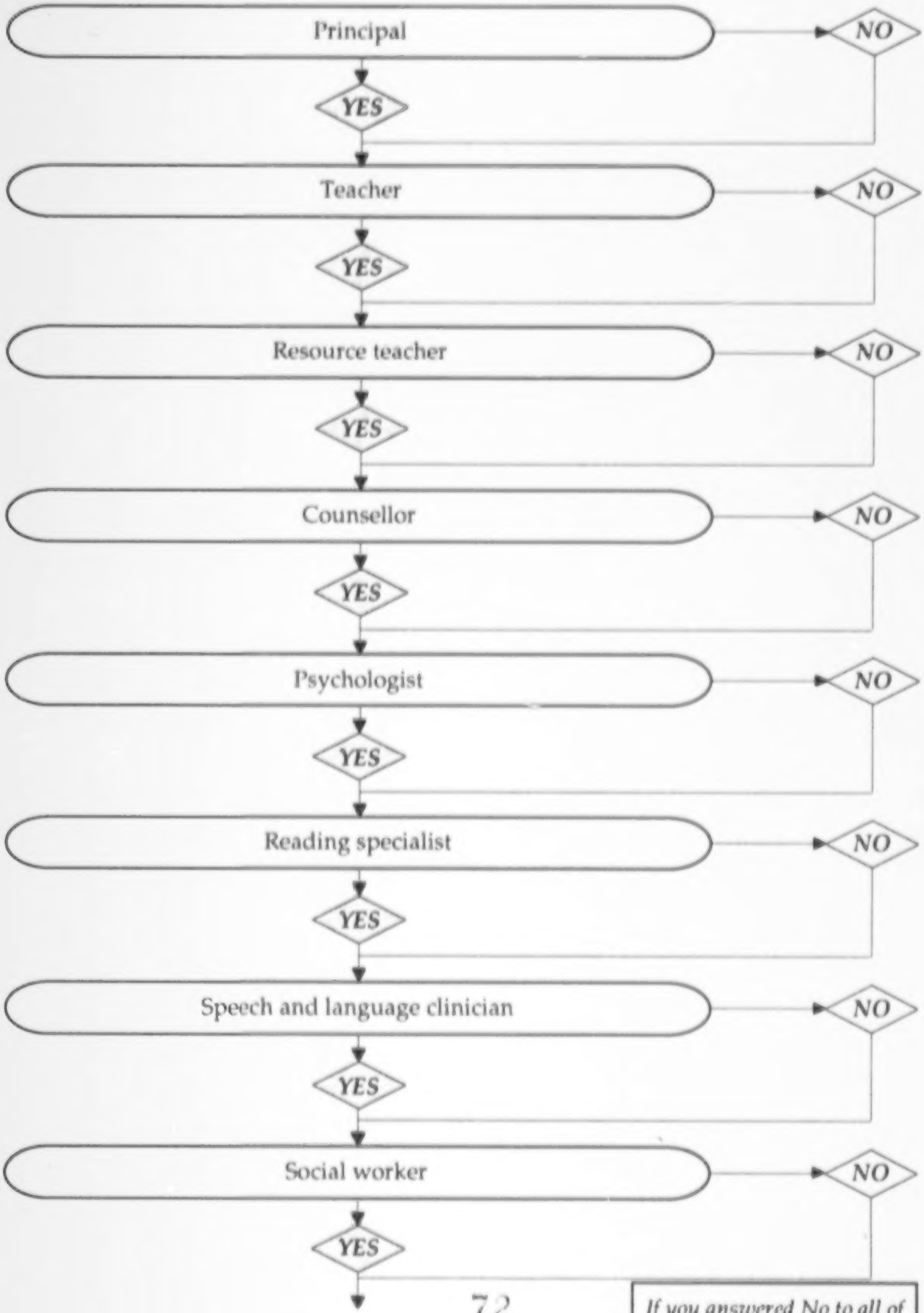
Who will be responsible for developing an Individualized Program Plan based on assessment information?

Who will have input into the plan?

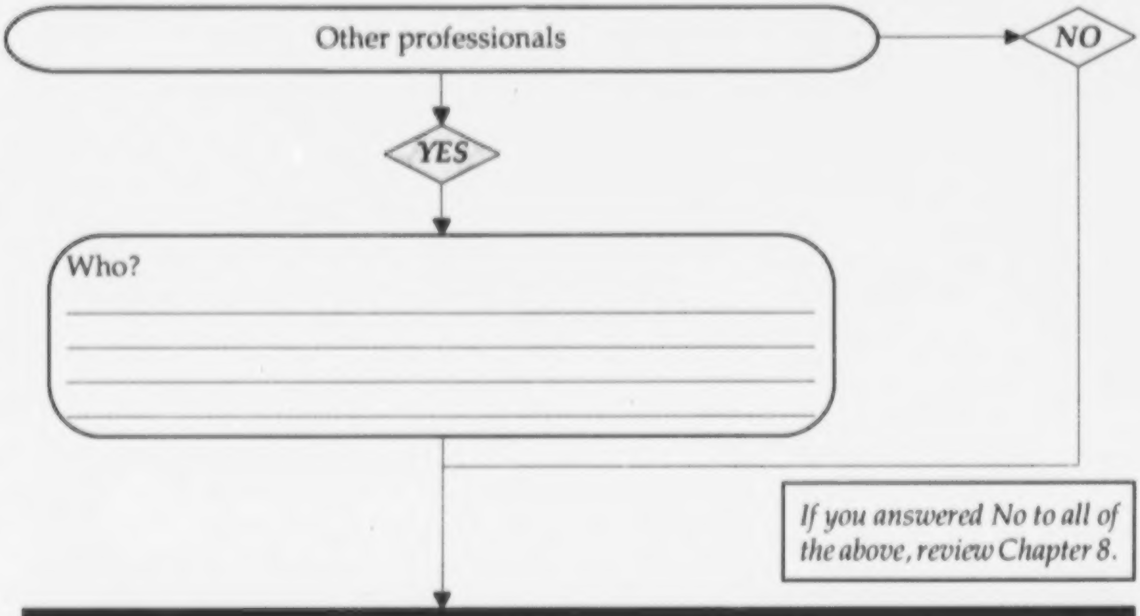
Parents

Students

If you answered No to all of the above, review Chapter 8.


Principal
NO
YES
Teacher
NO
YES
Resource teacher
NO
YES
Counsellor
NO
YES
Psychologist
NO
YES
Reading specialist
NO
YES
Speech and language clinician
NO
YES
Social worker
NO
YES

If you answered No to all of the above, review Chapter 8.


Other professionals
NO
YES
Who?

If you answered No to all of the above, review Chapter 8.

16. Describe how the assessment process helped you understand the needs of these two students.

Group Assessment

The primary difference between the group assessment process and that of individual assessment is that the assessment procedure used is almost always a formal test. The major issue becomes the choice of an appropriate test to answer the questions of interest. Many of the steps identified in individual assessment apply here as well.

Consider the following vignette:

> A school jurisdiction has introduced a new math curriculum in their Grade 6 classes. They want to know how students are doing.

What factors should be considered before choosing an assessment instrument?

____

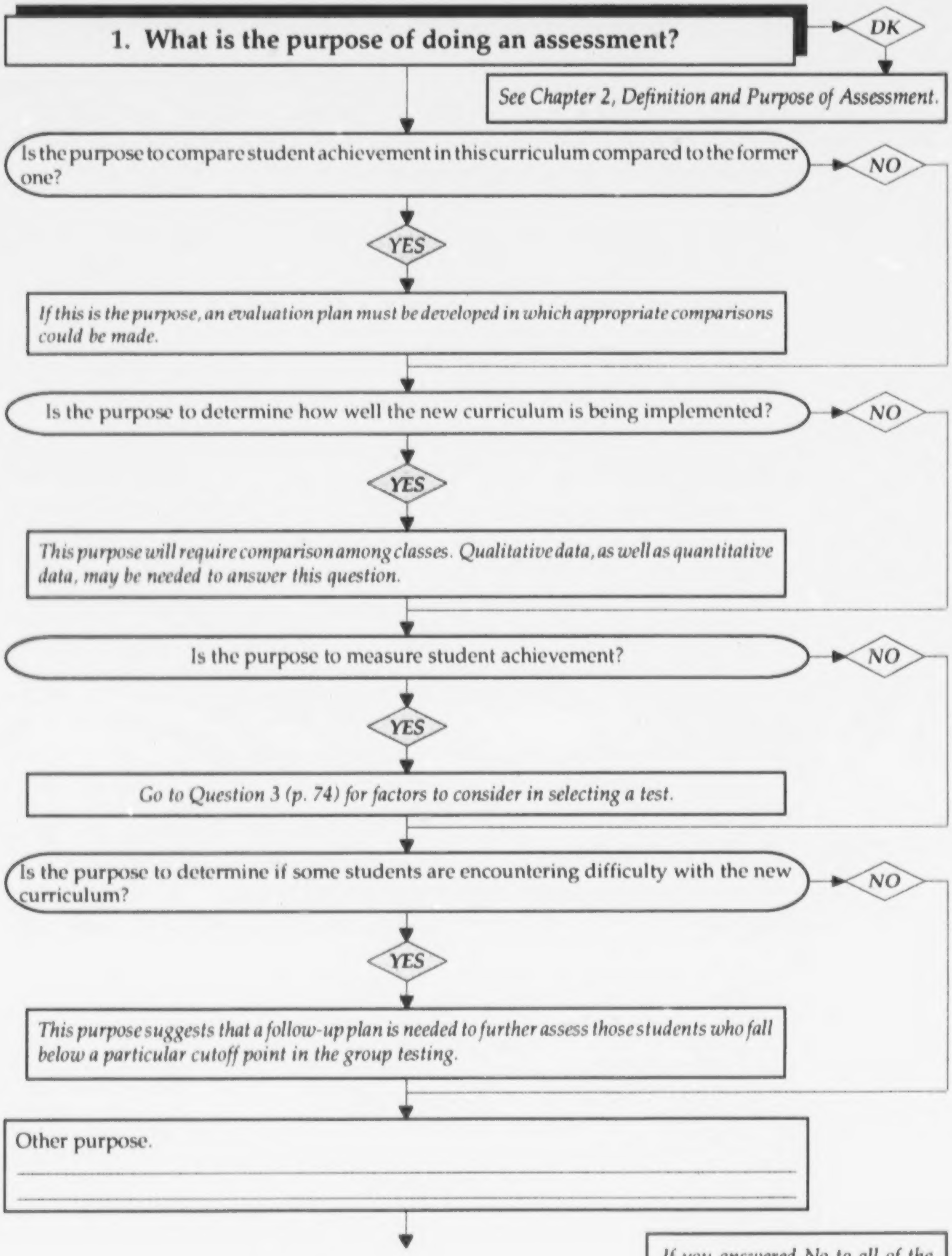
____

____

____

____

The following steps will help you work through the group assessment process.



1. What is the purpose of doing an assessment?

See Chapter 2, Definition and Purpose of Assessment.

Is the purpose to compare student achievement in this curriculum compared to the former one?

If this is the purpose, an evaluation plan must be developed in which appropriate comparisons could be made.

Is the purpose to determine how well the new curriculum is being implemented?

This purpose will require comparison among classes. Qualitative data, as well as quantitative data, may be needed to answer this question.

Is the purpose to measure student achievement?

Go to Question 3 (p. 74) for factors to consider in selecting a test.

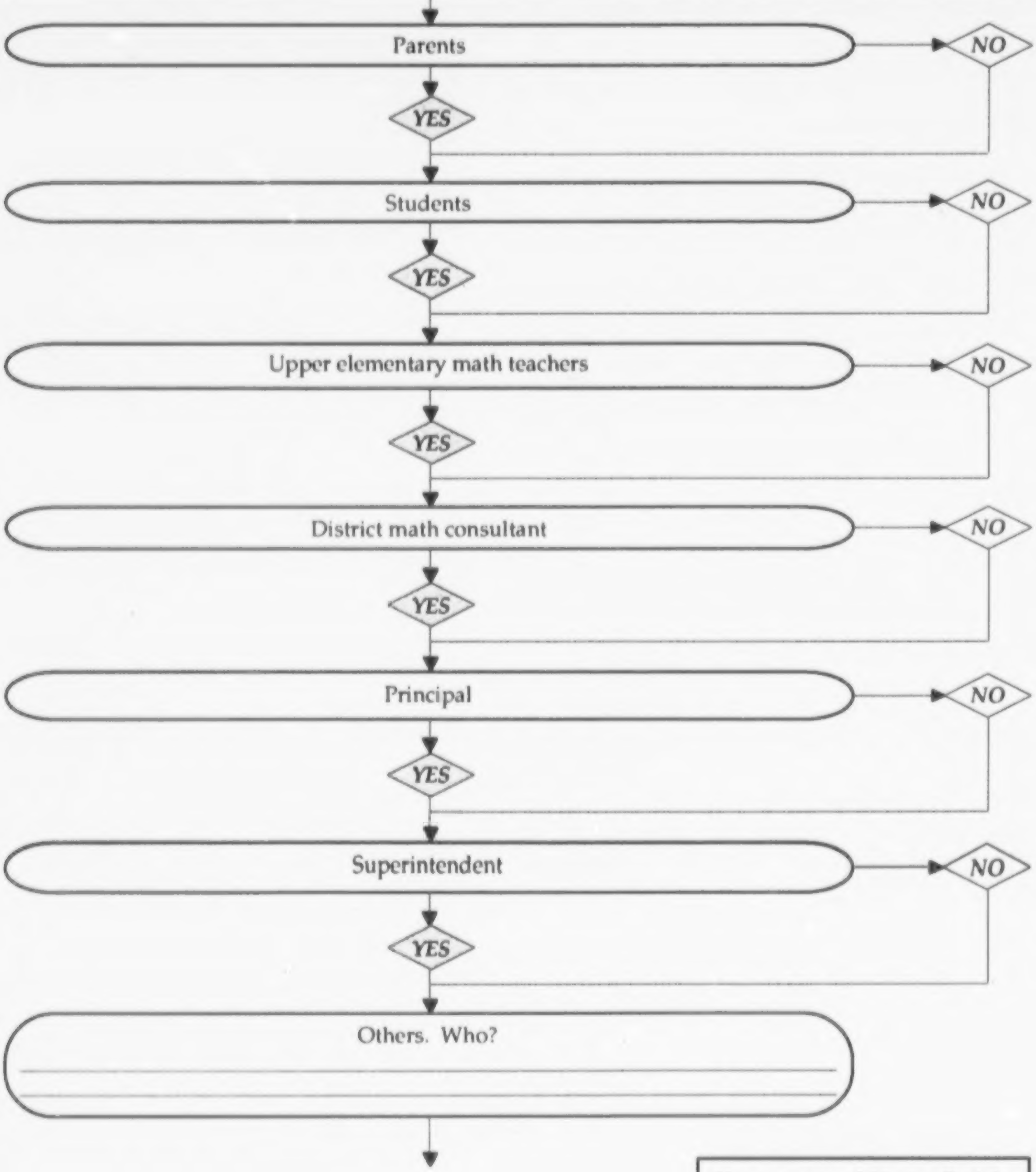
Is the purpose to determine if some students are encountering difficulty with the new curriculum?

This purpose suggests that a follow-up plan is needed to further assess those students who fall below a particular cutoff point in the group testing.

Other purpose.

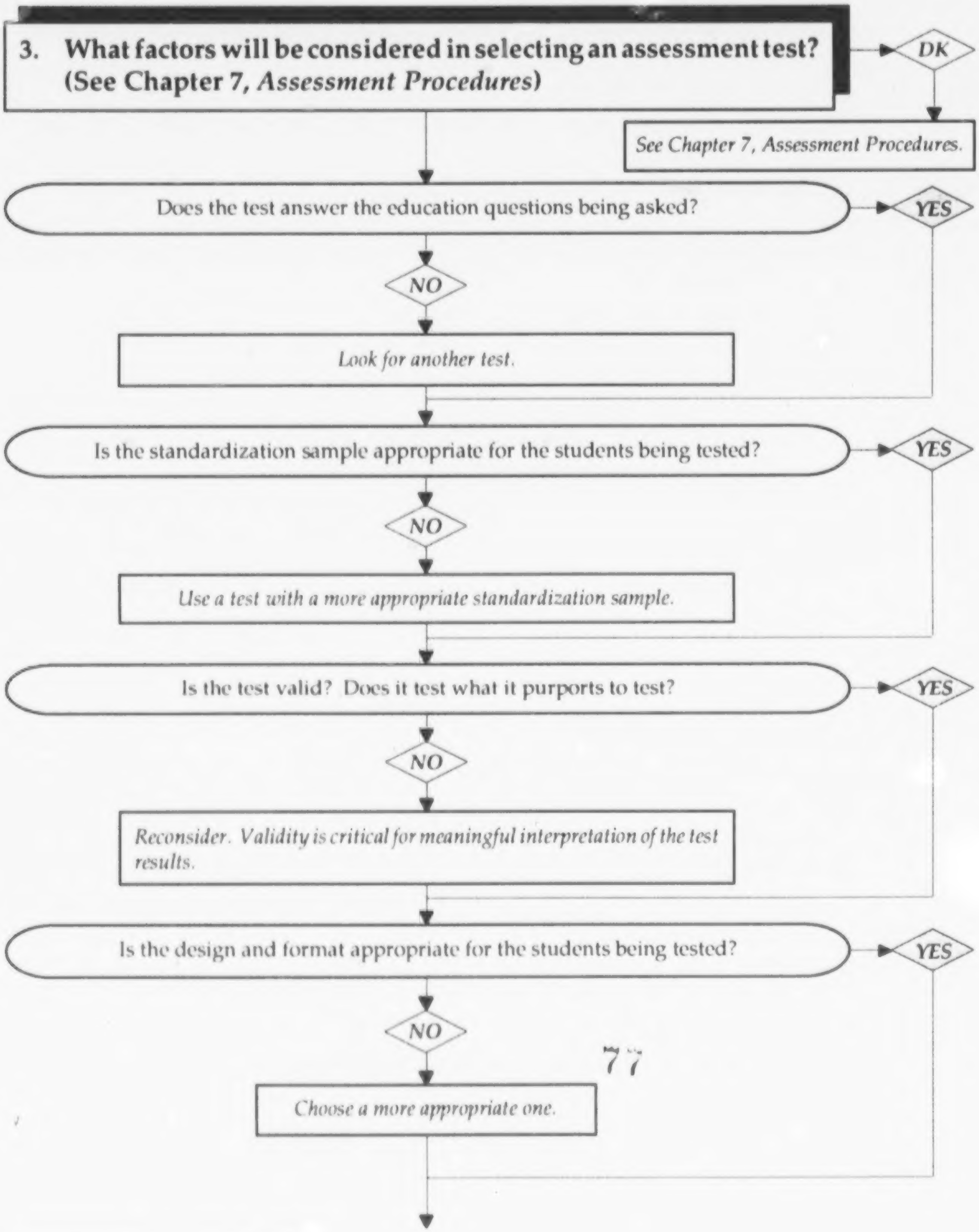
If you answered No to all of the above, review Chapter 2.

2. Who will have input into planning the assessment? All of the people listed below have a stake in this assessment. They will not necessarily all be involved in planning this assessment but their input should be considered. (See Chapter 6, *Referral and Assessment Planning*)

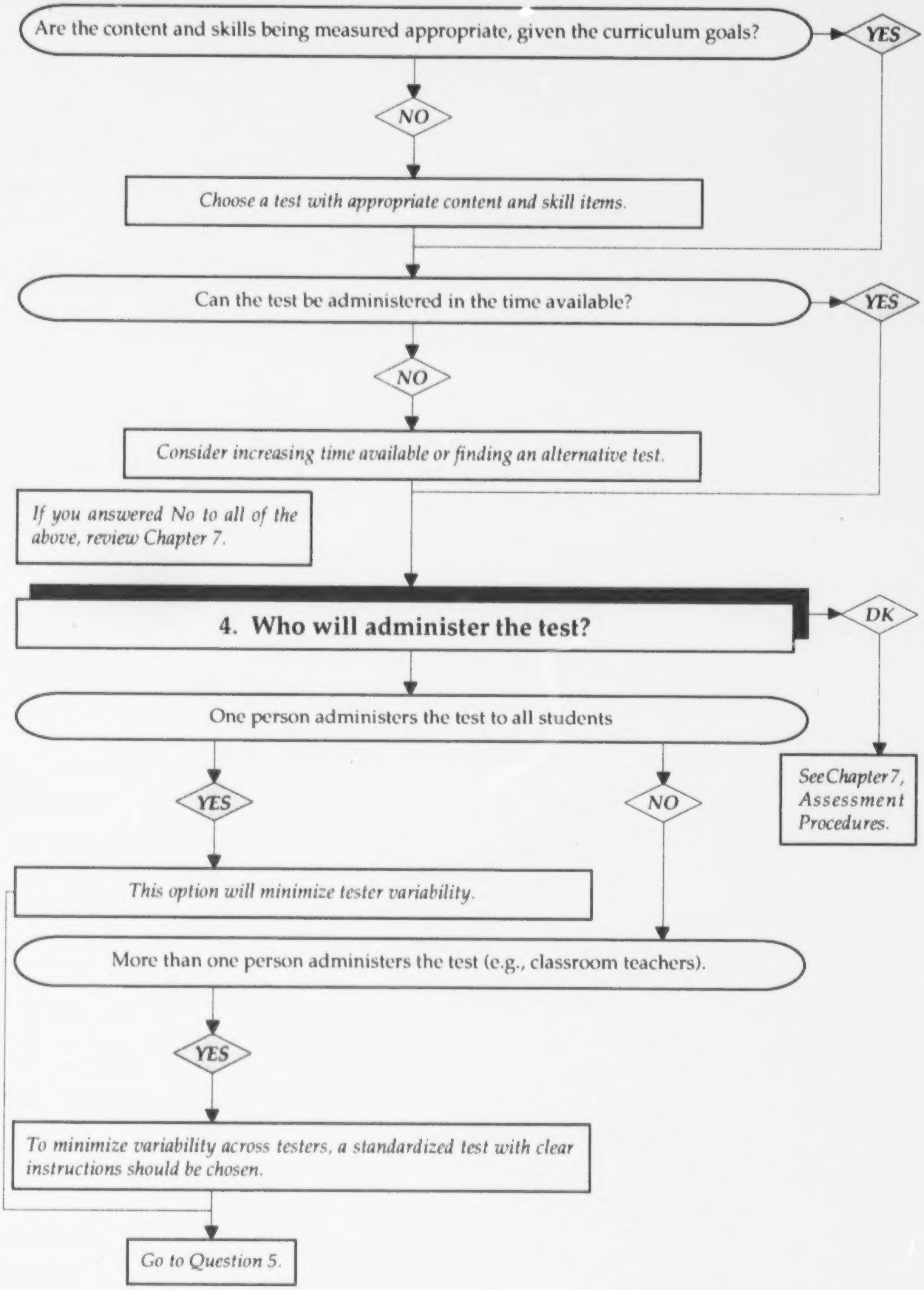

Parents
NO
YES
Students
NO
YES
Upper elementary math teachers
NO
YES
District math consultant
NO
YES
Principal
NO
YES
Superintendent
NO
YES
Others. Who?

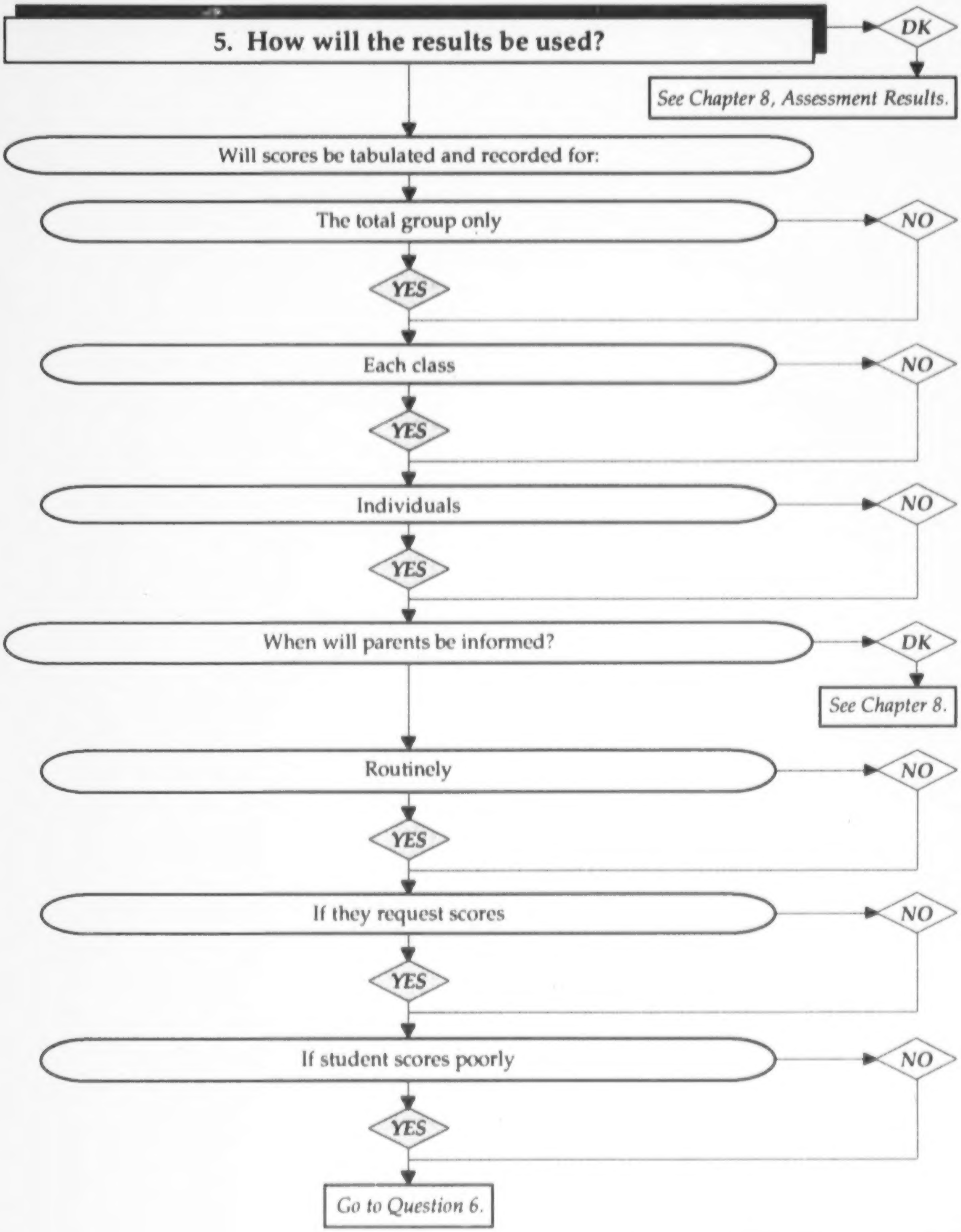
If you answered No to all of the above, review Chapter 6.

3. What factors will be considered in selecting an assessment test? (See Chapter 7, *Assessment Procedures*)

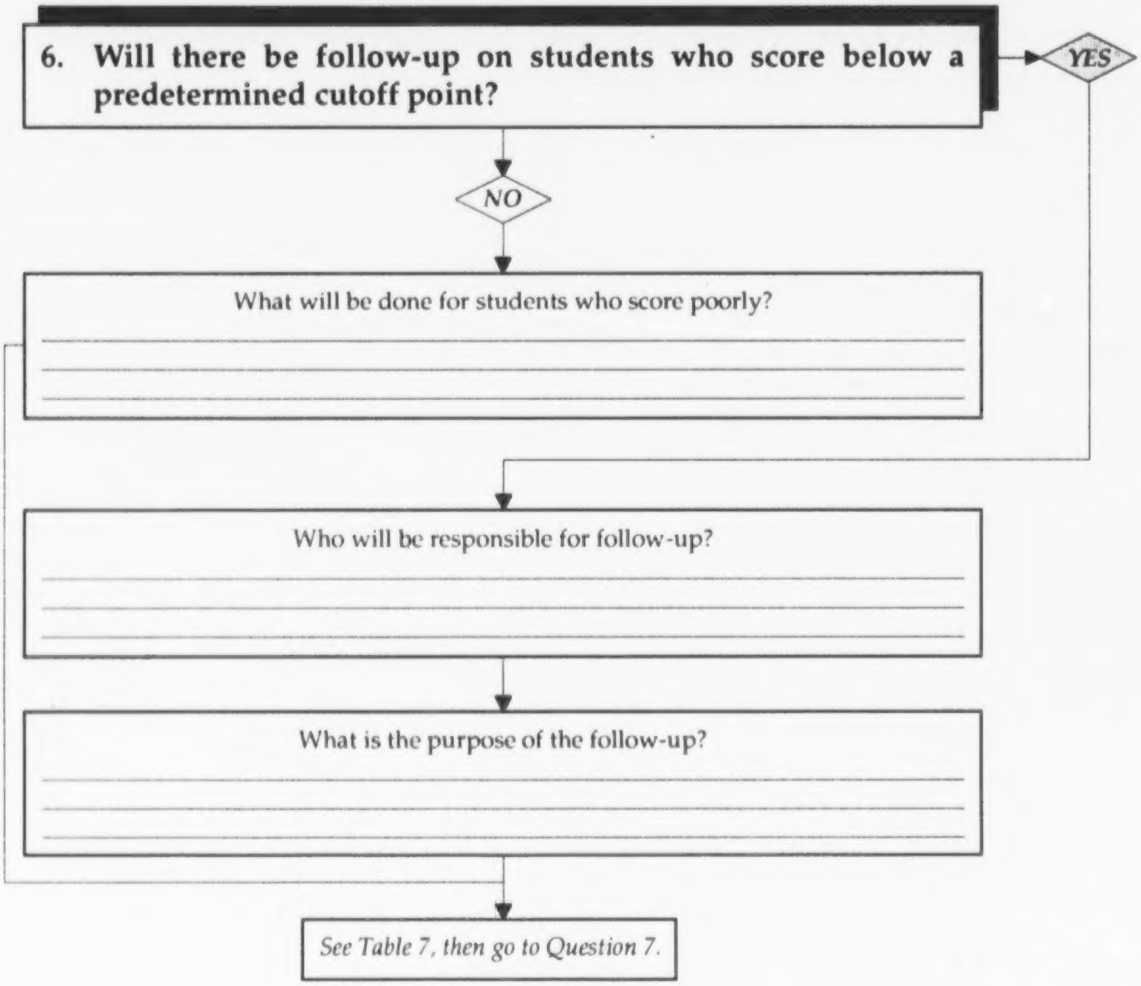

DK
See Chapter 7, Assessment Procedures.
Does the test answer the education questions being asked?
YES
NO
Look for another test.
Is the standardization sample appropriate for the students being tested?
YES
NO
Use a test with a more appropriate standardization sample.
Is the test valid? Does it test what it purports to test?
YES
NO
Reconsider. Validity is critical for meaningful interpretation of the test results.
Is the design and format appropriate for the students being tested?
YES
NO
Choose a more appropriate one.

If you answered No to all of the above, review Chapter 7.


Are the content and skills being measured appropriate, given the curriculum goals?
YES
NO
Choose a test with appropriate content and skill items.
Can the test be administered in the time available?
YES
NO
Consider increasing time available or finding an alternative test.
If you answered No to all of the above, review Chapter 7.
4. Who will administer the test?
DK
See Chapter 7, Assessment Procedures.
One person administers the test to all students
YES
NO
This option will minimize tester variability.
More than one person administers the test (e.g., classroom teachers).
YES
To minimize variability across testers, a standardized test with clear instructions should be chosen.
Go to Question 5.


5. How will the results be used?
DK
See Chapter 8, Assessment Results.
Will scores be tabulated and recorded for:
The total group only
NO
YES
Each class
NO
YES
Individuals
NO
YES
When will parents be informed?
DK
See Chapter 8.
Routinely
NO
YES
If they request scores
NO
YES
If student scores poorly
NO
YES
Go to Question 6.

If you answered No to all of the above, see Chapter 8.



6. Will there be follow-up on students who score below a predetermined cutoff point?

What will be done for students who score poorly?

Who will be responsible for follow-up?

What is the purpose of the follow-up?

See Table 7, then go to Question 7.

Table 7
Possible Purposes for Follow-up Testing

Program Planning

This may require individual assessment. Before referring students for individual assessment, you may want to give a test similar to the one administered to the group, but administer it individually (see Chapter 7, *Assessment Procedures*). Those students who continue to do poorly may require further assessment.

Another suggestion is to look at the individual responses of each student -- item analysis, pattern analysis.

Tracking

Another group test repeated at intervals may be sufficient.

7. Describe how the group assessment process helped you achieve the intended goals.

Summary

Initially, the behaviors of the two students described in the first vignette in this chapter appeared similar. As more specific information was collected about each student, however, it became apparent that the observable behaviors had quite different underlying causes. Thus, the questions of interest, the personnel required to obtain a more in-depth understanding, and the recommendations were very different for each student. Follow-up is required to determine the appropriateness of the assessment and resulting recommendations.

Group assessment follows a process similar to that of individual assessment, with respect to clarifying the purpose and questions to be answered. Usually, formal testing procedures are used to gather information. Decisions need to be made regarding individual and group follow-up testing.

SECTION II

ISSUES TO CONSIDER IN ASSESSMENT

- Determining Your Philosophy
- Deciding Who Will be Assessed
- Referral and Assessment Planning
- Assessment Procedures
- Assessment Results

CHAPTER 4

DETERMINING YOUR PHILOSOPHY

Philosophy of Education

The way we operate in this world is affected by our past experience. This past experience in a family, with friends and colleagues, in school and in the workplace has led to a system of beliefs and values that influence our actions. Most of us do not think very much about these beliefs and actions in a systematic way. In your interview for your first teaching position, you may have been asked the following question: "What is your philosophy of education?" Fresh out of university, you may have said something like, "I believe that all children have a right to education and that it is my responsibility as a teacher to find the best way to help each child learn." How much have you thought about philosophy since then?

Having a personal philosophy is critical for effective practice as a teacher or an administrator and for doing assessments. A well-developed, clearly articulated philosophy provides a basis to think and make judgments about new ideas, programs, fads, pressures, etc. (Maxcy, 1979). What one believes about the purpose and goals of education, how students learn and why some students encounter difficulty learning will influence what is done to help the student. Your personal philosophy will influence you to do things in a particular way (Mitzel, 1982).

In addition to a personal set of beliefs, there are public views of education that may influence our actions.

Public Philosophy of Education

Public philosophy is reflected in dictionaries, government policy statements and writings by critics of education.

One dictionary defines *education* as:

> 1. The act or process of imparting or acquiring general knowledge, of developing the powers of reasoning and judgment, and generally preparing oneself or others intellectually for mature life.
>
> 2. The act or process of imparting or acquiring particular knowledge or skills as for a profession.
>
> 3. A degree, level or kind of schooling; a university education.
>
> 4. The result produced by instruction, training or study.
>
> Education is the development of the special and general abilities of the mind (learning to know).
>
> (Random House Dictionary of the English Language, 1987, p. 621)

The above definition implies that the term *education* may be used broadly to refer to knowledge and skills acquired generally and through specific instruction. What is meant by *generally*? Is *general education* what is learned through direct experience as one interacts with people and things in the environment? Does it also refer to the modes of thought and feeling (often referred to as *culture*) that are acquired from being part of a family and society? Does *specific education* refer primarily to learning in the classroom or in formal programs of study? What does the statement "My education was interrupted by my schooling" mean, a statement variously attributed to Mark Twain, Bernard Shaw and others (Garforth, 1985, p. 15). Some philosophers have separated *education* from *schooling*. Others have discussed *formal education* and *informal education*. *Schooling* and *formal education* refer to those activities that go on in schools and other institutions of learning. *Informal education* is used to refer to those activities outside formal settings that influence development and learning (Maxcy, 1979).

Provincial governments also have statements of philosophy that are designed to guide educators and provide a common framework. Such philosophies are designed to structure decision-making on a systemwide basis and provide a basis for the development of policy.

The Alberta government's philosophy of education is as follows:

> Education is a critical function of society and students are the focus of that activity. Education, accessible to all Alberta students, is the most efficient way of transmitting the required knowledge, skills and values to foster the advancement and survival of a democratic society. Through education, students are assisted to realize their full potential, contribute to society and shape their individual and collective futures. (Alberta Education, 1989, p. vii)

Your interpretation of public philosophy will be influenced by your personal philosophy. For example, while the above quotation claims that the aim of education is to help students realize their full potential, how one believes that should be accomplished will vary. Your beliefs about the learning process, for example, will influence your actions.

Public philosophy is also reflected in the writings of critics of education (e.g., Dewey, 1916; Illich, 1971; Kozol, 1967; Schwebel, 1968). These authors, in critiquing the current educational practices of their day, encourage the public to reflect on the faults within the educational system and urge a philosophically based redirection of practice (Mitzel, 1982). Educational movements such as "the progressive education movement," "free schools" and "back to the basics" are all reflections of public philosophy.

The recent emphasis on the importance of teaching thinking skills (Feuerstein, 1980; De Bono, 1984, 1986) has had a major influence on public philosophy. Publicly sponsored documents, based on current thinking in the fields of education and psychology, such as *Students' Thinking* (Alberta Education, 1987b) and *Teaching Thinking* (Alberta Education, 1990) are designed to change the way teachers, administrators, curriculum designers and others view thinking and learning.

Personal Philosophy of Education

An in-depth discussion of philosophies of education is beyond the scope of this manual. Rather, this section is designed to explain how personal and public philosophies of education influence thoughts and actions, and illustrates how these philosophies can influence the assessment process.

A *personal philosophy* includes the set of values and beliefs that guide one's practice. Personal philosophies may range from unexamined, general points of view to well-thought-out, systematic, articulated positions. Educators hold personal beliefs about what are the right, sensible and appropriate things to do to promote learning (Mitzel, 1982). They also hold beliefs about the impediments to learning.

Factors Influencing Education

There are many factors that influence how well students do in school and beliefs about how these factors, many of which are outside the control of schools, can affect the assessment process.

The following vignette is designed to illustrate how one's beliefs about the factors contributing to learning difficulties can influence the types of questions asked in an assessment. Read this information as if you were a member of the team to which this child has been referred and then answer the questions posed. There are no right or wrong answers.

Name: Laily
Age: 7 years, 3 months
Grade level: 2
Date: February

The classroom teacher refers Laily to the school resource team (principal, resource teacher/reading specialist, psychologist, language specialist). The child is encountering difficulty with reading and written language. The teacher reports that Laily knows few sound/letter correspondences, and knows only six words by sight. Her printing is poor. She can write a few letters but for the most part printing is an illegible scribble. The child is quiet in class, seldom volunteers information or responds to questions. She just sits quietly, doodling in her workbook or staring vacantly into space. She is helpful in the classroom if asked (e.g., putting materials away, delivering a note to the office) and appears to know the classroom routines. She is a loner, playing by herself at recess and sitting alone at lunch. Her school file indicates that Laily lives with her father. Her parents are divorced. She began at this school last year, having attended kindergarten in another city.

If you were a member of this resource team, with only the above information, what else would you want to know?

List three questions you would ask the teacher or parent to gather more information.

1. ______________________________
2. ______________________________
3. ______________________________

The types of questions that you might ask are influenced by your beliefs and values in a number of areas, including what you believe is expected in your school jurisdiction. As you read the following section, think about your responses and what they tell you about your personal philosophy.

Role of the Family in Education

One typical set of questions revolves around the family. Why is Laily living with her father rather than her mother? How long have the parents been separated? Are there other children in the family?

These questions reflect the belief that the family plays an important role in the education of the child and that family difficulties may lead to problems learning in school. The roles that the family and society play in education have long been debated (Bradley & Caldwell, 1976, 1980, 1984). It is generally agreed that the family plays a critical role in informal education, and research on the development of competence in young children highlights the importance of quality parent-child interactions (Klein & Feuerstein, 1984; White, Kaban & Attanucci, 1979; Lidz, 1987).

If there are family difficulties, how does this affect the educator's role and responsibilities? Some teachers excuse their lack of success in teaching a child by blaming the family. "How can I be expected to teach this child when he lives in such a chaotic family -- no bedtime, no homework supervision, inconsistent school attendance?" etc.. It is important to examine your personal beliefs about the family's role and how these beliefs affect your teaching practices. It is also important to consider how your beliefs might affect the types of assessment information you gather and the kinds of recommendations you might make based on assessment results.

Provincial policy reflects the view that education is a responsibility widely shared within the community and that there must be a partnership between home and school.

> The Goals of Education and the Goals of Schooling provide the foundation for a partnership in the education of children. For the Goals of Schooling, the school has primary responsibility, while the responsibility for the Goals of Education is shared among school, home, and other community institutions and agencies. (Alberta Education, 1987a, p. 7)

Parents are required by Alberta law (*School Act*) to ensure regular attendance. They are also permitted some choice as to how and where their children are educated, subject to the approval of the Minister or his/her delegate. Policy statements also suggest that "student program decisions should be made jointly with the students, their families and the school's professional staff" (Alberta Education, 1985, p. 15). What should the parents' role be in the assessment process? Should they just receive the assessment results or should they have input into the process? How do we help children whose parents show little or no interest in their children's schooling?

Role of Culture in Education

Another set of questions may relate to the role of culture and, in particular, how cultural differences may affect a child's school performance. Questions such as "What kind of a name is Laily?" and "Is she from another culture?" may reflect a belief that cultural differences affect learning. Perhaps some of Laily's passive behavior might be explained by cultural expectations. Perhaps English is not her first language or is not the language spoken in the home. How does culture affect learning? This is a long-debated topic in many fields, including education, sociology, anthropology and psychology. Our beliefs about the effects of cultural differences and cultural deprivation are powerful influences on our actions (Ginsburg, 1972; Tulkin, 1972).

It is important to make a distinction between *culturally different* children and *culturally deprived* children as the needs of these two populations differ greatly (Feuerstein, 1979). Both groups may exhibit difficulties learning, but those who are from a different culture may overcome their difficulties as they learn the new language and culture. Some children from different cultures, and some from the mainstream culture but whose families are considered low on the socioeconomic scale, may exhibit difficulties in school that are unrelated to learning a second language or new cultural expectations. The term *cultural deprivation* has been used to describe these children. Feuerstein (1979) defines *cultural deprivation* as alienation from one's own culture. He suggests that such alienation may be produced by sociological, economic, geopolitical and other factors that result in an impoverished transmission of culture. Feuerstein believes that the transmission of one's culture, any culture, is critical for the adequate development of cognitive skills. In order to learn to their full potential, children who are culturally deprived may need to be taught the basic processes of thinking and learning.

Inappropriate assessment of both culturally different and culturally deprived children has been a major concern in recent years. Children from different cultures have traditionally scored poorly on standardized tests (Samuda, 1975; Samuda, Kong, Cummins, Lewis & Pascual-Leone, 1991; Sattler, 1988). Such test results have been used to make placement decisions, resulting in inordinately high numbers of these children being inappropriately placed in special education programs. In addition, the beliefs held about such children, regardless of an individual child's performance, may influence decisions made about them. Research has shown that the determination that a child has specific learning difficulties can be influenced simply by changing the description of the father's occupation or group status, keeping all other assessment data constant (Ysseldyke, 1979).

Referring back to the vignette about Laily, it is evident that questions about culture may be important in understanding Laily's difficulties. It is also critical that you examine your beliefs and assumptions about the effects of cultural differences and deprivation on learning so that an effective program can be developed for this child.

Think about the following:

Let's assume that Laily's father is from a culture in which education is not considered particularly important for girls. He believes that girls should be obedient, compliant and passive. His goal is to ensure that Laily becomes a good homemaker and finds a husband to take care of her.

How might this information influence your understanding of Laily, your selection of assessment procedures, and your recommendations for programming? Should the father's feelings and beliefs about what is in the best interests of his daughter be taken into account in planning an education program?

Role of Individual Differences

We may also have beliefs about the causes of individual differences among children, including the influences of heredity and environment on intelligence and personality, the events surrounding birth and early development, and the achievement of developmental milestones.

- **Heredity-Environment Debate**

Questions such as "If Laily has brothers or sisters in school, how are they doing?" may suggest a belief that school performance is attributable to hereditary factors. This assumes that all children in a family come from the same home environment. Thus, if Laily's brother and sister are doing well in school, one might conclude that the problem is specific to Laily and not to her general environment. There are flaws in this argument, because we know that even in the same home, siblings have differing experiences. For example, the age at which the parent's separation occurred would differ for each child and would be experienced differently by each child. Parental expectations may also differ. For example, boys may be expected to perform better in school.

However, the point to explore here is your belief about the roles of heredity and environment. If you believe that hereditary factors play a major role in the ability to learn, the types of assessment procedures you select, and the recommendations you make based on the assessment, may be different than if you believe that environmental influences are the primary influences on learning.

Most current theorists agree that heredity and environment jointly influence intelligence and personality.

- **Intelligence**

Hereditary factors have long been considered a major factor in determining intelligence. Consider your beliefs about intelligence. What is its role in learning and can it be modified? Some researchers have argued that intelligence is inherited (Jensen, 1969; Rushton, 1988) and that this explains differences in performance. This belief suggests that education can do little to change intelligence and that children who are less intelligent will remain so regardless of our efforts. Jensen and Rushton also argue that particular racial groups are genetically more intelligent than others. These views have serious implications for education and need to be examined carefully. For a discussion of the implications and fallacies in Rushton's work, refer to Weizmann, Welnar, Weisenthal and Ziegler (1989).

Others have argued that while intelligence is likely inherited, the application of intelligence -- *cognitive processing* -- is environmentally determined. Differences in school performance are more a result of differential application of cognitive processes than of intelligence (Haywood, Burns, Arbitman-Smith & Delclos, 1984). Feuerstein (1979) has been a major proponent of the belief that intelligence can be modified through the systematic teaching of thinking skills. He argues that many children perform poorly due to inefficient or deficient cognitive functions that can be corrected or improved through systematic instruction. His philosophy demands that we find a way to teach students to think and learn independently (*active modificational* philosophy) rather than just accepting a child as slow and accommodating the environment to him/her (*passive acceptant* philosophy).

Current theories of intelligence suggest that there are multiple types of intelligence and that some children display more of one type than others (Sternberg, 1985; Gardner, 1983). Caution must be exercised when assessing intelligence because intelligence tests tap primarily linguistic and logical capabilities. Other types of intelligence include musical, spatial, body-kinaesthetic, interpersonal and intrapersonal (Gardner, 1983; Gardner & Hatch, 1989). It has been argued that schools must value individual differences in types of intelligence and encourage all children to reach their potential. Efforts are being made to develop alternative assessment devices to tap these other types of intelligence (Gardner & Hatch, 1989; Sternberg, 1984, 1985). It will be interesting to see how valid these types will prove to be and how they will affect educational approaches. It is apparent, however, that beliefs about the influences of heredity and environment on intelligence can influence the selection of assessment procedures and the types of recommendations resulting from the assessment.

- **Personality**

Personality has also been discussed in the heredity-environment debate. How much of personality is inherited? Can it be modified? Some theorists have suggested that personality traits are inherited (Thomas & Chess, 1977). Others have argued that our personality is a direct result of our interactions with our environment (Skinner, 1974). Keogh and Burnstein (1988) have demonstrated in several longitudinal studies that the temperaments identified by Thomas and Chess (1977) are resilient and affect how teachers interact with and make judgments about students. If so, how does this affect assessment of learning and behavior difficulties? What are the implications for programming?

Current research suggests that both inherited traits and environmental influences contribute to the development of personality.

- **Birth and Early Development**

Individual differences among children may be related to events surrounding birth and early development. Questions regarding Laily's birth and early development reflect a belief that these events may help us understand later learning. There has been considerable effort in the fields of medicine, psychology and education to relate difficulties in early development to later learning (Field & Sostek, 1983). It has been well-documented that neurological difficulties (e.g., as a result of anoxia, strokes or head injuries) affect behavior. Think about how your knowledge and beliefs about neurological impairment affect your actions. How might your assessment or programming recommendations be influenced if Laily's medical history indicated that her mother had an abnormally long delivery? Would your recommendations differ if you knew for a fact that she had suffered brain damage due to anoxia or if her physician or neuropsychologist suspected brain damage based on their observation of her behavior. Information about problems during birth and development may help explain current difficulties but will they guide the development of effective program planning?

- **Developmental Milestones**

When gathering background information on a child, assessors often ask parents about developmental milestones: "When did your child begin to walk?" "When did he say his/her first word?" etc.. These questions reflect a belief about the importance of the maturation process and imply that delayed milestones may explain later delays in the acquisition of academic skills and, alternatively, that advanced achievement of milestones may explain advanced academic skills. Let's assume that Laily's father reports that Laily did not walk until two years of age and did not say her first word until she was three years old. How might this knowledge affect your understanding of her current difficulties and your decisions regarding assessment?

Summary

Your personal philosophy of education -- the set of values and beliefs that guide your actions -- influences your practice as an educator. Your beliefs about the family's role in the education process are important to consider, including how family experience affects a child's ability to learn in school as well as the role of families in schools. Your beliefs about the impact of culture on school performance are also important to consider as they may influence the selection of assessment procedures and the resulting recommendations. Beliefs about individual differences also affect assessment and programming. Beliefs regarding hereditary and environmental influences on intelligence and personality have important implications for teaching and assessment. How do events at birth and during early development affect children? Are delayed developmental milestones a factor in explaining individual differences? Your beliefs about these factors, all of which affect learning, may influence your approach to assessment and the resulting educational recommendations.

Philosophy of Learning

Our beliefs about how children learn influences how we teach them, how we evaluate their performance and what we do when a child excels at, or has difficulty, learning. Your personal theory about learning is likely based on what you learned in your education courses as well as from observations of children in the process of learning.

Consider the following vignette about a child encountering difficulty completing a project. Hypothetical dialogues between two different teachers and the child follow. Think about the responses of each of the teachers and what their responses suggest about their beliefs regarding how children learn.

Name:	Robert
Age:	11 years, 8 months
Grade level:	6

Robert is experiencing difficulty doing a report for social studies. The project, assigned two weeks ago, is due in a few days. The teacher has given the students time to work on the project in class. There has also been an expectation that the students will work on the project at home, using public library resource materials. The teacher observes that Robert has written only a few sentences of the rough draft, does not appear to have any notes from the resource materials and, in general, appears uninterested in the project. During class time, he is doodling on a paper and whispering to his neighbour rather than working on the project.

Mr. Smith's Response

Mr. Smith: Robert, you seem to be having some difficulty with your report. May I help you?

Robert: Yeah, I don't know how to do it.

Mr. Smith: Robert, do you remember that I gave the class very specific instructions about how this project was to be done? This project is very important for your mark in social studies.

Robert: Yeah, but I'm not very good at social studies.

Mr. Smith: Of course you are. You are a very bright boy. Let me help you. (Mr. Smith then takes out the instruction sheet and outline given to the students about the project and goes through it step by step.) First, you need to decide on a topic. I see you have chosen China. Second, you must narrow your topic down. Have you done that?

Robert: What do you mean?

Mr. Smith: Well, China is much too broad a topic. Choose something about China to do your project on. Will you do that next?

Robert: Yeah.

Mr. Smith: Good, that will help you get started. When you have done that, the next step is to go to the library and find books about your topic, read them, take notes and then write your report. Just like we did in the unit on communities. Is this information clear?

Robert: Yeah, but I don't have much time left and my mom can't take me to the library.

Mr. Smith: I'll give you an extra few days. Do you think you could have it in by next Monday?

Robert: I guess so.

Mr. Smith: I know you can do a good job of this, Robert. You may go see the librarian in our school library now while the other students are working on their reports.

Mrs. Brown's Response

Mrs. Brown: Robert, you seem to be having some difficulty with your report. How can I help you?

Robert: I don't know. It's too hard. I can't do it.

Mrs. Brown: What part of this project is giving you trouble?

Robert: I don't know what to do.

Mrs. Brown: Well, maybe I can help you. What do you think you have to do for this project?

Robert: Write about China.

Mrs. Brown: Okay, so you have chosen China for your topic. What is it about China that you want to write about?

Robert: Just China.

Mrs. Brown: China is a pretty big topic. Is there a way that you could narrow it down so that it might be more manageable?

Robert: What do you mean? I want to do the project on China.

Mrs. Brown: China is a good topic but perhaps you could think about a particular thing about China that you are interested in. What questions could you ask about China?

Robert: You mean like "How many people live there?" or "What they eat?"

Mrs Brown: Exactly. What do you know about China that particularly interests you?

Robert: Well, I saw a TV show about the Great Wall in China. It was really neat because it's so big and it must have taken thousands of people to build it.

Mrs. Brown: It sounds like you know a lot about the Great Wall. Would you like to do your project on it?

Robert: Yeah, that sure would be easier than trying to write about all of China.

Mrs. Brown: Great, you're on your way. Now, let's think about how you might organize your report. What do you need to do first?

Robert: I could get some books that talk about the Great Wall.

Mrs. Brown: Okay, and what will you do with the books?

Robert: Read them and take notes.

Mrs. Brown: Good idea, but is there something you should do before reading the books?

Robert: You mean like think about what information I'm looking for? Like we did when we did our project on communities?

Mrs. Brown: Exactly. Do you remember how we developed some questions and organized them before we even started to read about communities?

(The interchange continues until the teacher is sure Robert understands the task and is ready to work on his own.)

In the space below, note the differences in the two teachers' beliefs about learning, as they are reflected in their interactions with Robert.

Mr. Smith	Mrs. Brown
______________________________	______________________________
______________________________	______________________________
______________________________	______________________________
______________________________	______________________________

What the Teachers' Responses Suggest About Their Beliefs

It appears that both teachers are caring and concerned and genuinely want to help Robert be a successful student. How they attempt to do this differs significantly and may be influenced by differing beliefs about how people learn. Beliefs about the learning process have implications for the role that a teacher plays in promoting learning.

In their interactions, the teachers assume different roles and it appears that they see the responsibility of both the teacher and the student quite differently. The first teacher uses a directive, didactic approach in which he assumes responsibility for imparting the information that Robert does not seem to know or to remember. Robert is a passive participant in this process. The second teacher uses an interactive, mediational approach in which Robert is an active participant. Responsibility for learning is clearly placed with the learner. The teacher assumes the role of facilitator.

The repetition of information is the main approach used by the first teacher, Mr. Smith. He appears to believe that if a child is unable to do a task, it is because he does not have the necessary information. Therefore, he repeats the information and breaks it down into small, understandable steps. The second teacher, Mrs. Brown, makes a very different assumption about why Robert is unable to do the task. She appears to believe that Robert has some of the knowledge and some skills necessary to complete this task. Her role is to help him use his existing knowledge by clarifying information that he does not understand and by providing some strategies for approaching the task. In contrast to Mr. Smith, Mrs. Brown assumes that Robert has information he can use and does not need to be retaught. Her focus is on the process rather than the content of learning.

It appears that both teachers believe that motivation is an important part of learning. Mr. Smith uses extrinsic reinforcement -- rewards that are imposed on the situation -- in his efforts to motivate Robert. For example, he reminds Robert that the project is important for his grade in social studies. Mrs. Brown uses a more intrinsic approach to motivation -- inherently rewarding aspects of the task. For example, Mrs. Brown encourages Robert by asking, "What do you know about China that particularly interests you?"

Both teachers also appear to realize that Roberts self-concept affects his performance. Mr. Smith reflects this belief by telling Robert that he knows he is a bright boy and can do this task. Mrs. Brown helps Robert feel more competent by providing him with specific feedback based on his responses that indicate that he is a competent, able learner.

The roles of the teacher and student, the methods used to impart knowledge, and the roles of reinforcement and self-concept in the learning process have been actively debated in education circles for many years. Varying theories of learning influence teaching styles.

Learner as Recipient of Experiences

Mr. Smith's behavior reflects a traditional view of learning in which the learner is viewed as a passive recipient of information and a product of past experience. It is based on the theories of Skinner, Thorndike, Guthrie and others (Foster, 1986; West & Foster, 1976). In general, this view depicts the goal of learning as the acquisition of knowledge and skills and is still a common view of learning today (Säljö, 1979 reported in Schmeck, 1988; Marton, 1988; Van Rossum & Schenk, 1984). According to proponents of this view, external reinforcement or rewards play an important role in determining what and how well something is learned. Opportunities to consolidate the new information through practice must be provided. Generalization of prior learning is believed to occur only when new information differs slightly from previously learned information. Tests requiring recall of specific information are the major tool used to evaluate how well students are doing (Schmeck, 1988).

This view, with some elaboration to include Piaget's emphasis on the importance of the child's level of cognitive development, is prevalent among parents and teachers. It is generally accepted that children must be ready to learn and that children at different stages of development will experience and understand things in different ways (Foster, 1986). However, beyond that, beliefs about the importance of reinforcement (stickers, points, grades) and practice vary. Reinforcement theories of learning appear to be able to explain how many things are learned. If a child touches a hot stove, he/she will quickly learn not to do so again (*one trial-learning*). Similarly, a child learns to associate certain actions with particular outcomes. Being asked to put books away and sit quietly while waiting for the bell may signal lunch time and may even stimulate hunger (*classical conditioning*). Repetition is also accepted as an important part of learning. For example, spelling and multiplication must be practiced to achieve automaticity.

There is increasing evidence that these principles explain only a portion of the learning process. Teachers and parents know from experience that children learn many things without external reinforcement. Children do not appear to be motivated solely by extrinsic rewards and many authors have argued that overuse of extrinsic motivators, while effective in the short term, may be harmful to intrinsic motivation in the long run (Deci, 1985; Stipek, 1988). Studies have shown that when external reinforcement is effective, it is because of the feedback that it provides. Knowing whether a response is correct or not promotes as much learning as does reinforcement of a correct response. Reinforcement appears to be most effective when it serves the learner's need for information or feedback, not as a motivational tool (Foster, 1986).

Language theorists raised doubts about the validity of traditional views of learning when they discovered that children appear to actively construct language, not simply repeat what they hear around them (Brown & Bellugi, 1964). How could you explain a child saying, "I *runned* to the store," a phrase he/she has not likely heard others say? Reading teachers have observed that many children teach themselves to read when there is something they want to read (Meek, 1983). Current views of learning propose different roles for teachers and learners. Recent research by cognitive psychologists paints a much more complex picture of the interaction between the learner's past and present knowledge and the roles of parents, teachers and peers.

Learner as Thinker

Mrs. Brown's interaction with Robert reflects a view of learning that sees the learner as an integral, active part of the learning process. Piaget (1964) believed that the child's level of cognitive development influences his/her understanding of experiences. He argued that new information is assimilated into cognitive schemes that have been constructed on the basis of past experience. These schemes undergo transformation (develop) as a result of direct experience with objects and information from others (referred to as *social transmission*). These experiences are interpreted according to the child's level of understanding but, at the same time, each new bit of information disturbs the existing schema and eventually results in a reorganization of information in new ways. There has been much research on and debate about Piaget's theories, and current cognitive theorists differ from Piaget in explaining development and learning. However, several important principles are still considered valid. The notions that children are active participants in learning, that past experience has an impact on learning, that new knowledge must be related to prior knowledge and organized into meaningful structures, and that children are intrinsically motivated to learn are all widely-accepted principles.

Current views of learning take into account what has been learned about cognitive processes over the past 10 to 15 years. As in more traditional views, motivation continues to be a focus but the emphasis has shifted from extrinsic motivators -- those provided by someone or something in the environment -- to an intrinsic motivational orientation. There has been a realization that for learning to be successful, it must be rewarding in and of itself (Stipek, 1988). Understanding the purpose and meaning of the information being learned is considered critical for intrinsic motivation and for learning. Children experiencing learning difficulties often do not understand what they are learning or why. This may be because of several factors, including the way information is presented and/or their inability to relate (or lack of awareness of the importance of relating) new information to knowledge they have already acquired. The importance of meaning, and of relating existing knowledge to new information (e.g., for reading comprehension) are repeated themes in the literature on learning (Pearson, 1985; Brown & Campione, 1986; Schmeck, 1988).

In addition to stressing that what is learned must be meaningful, research has focused on how children learn and what they understand about their own learning and cognitive processes (Brown, 1975). *Metacognition* refers to one's knowledge about one's own cognitive processes (Flavell, 1976). Metacognitive skills are referred to as *executive functions* in many theories of human memory and artificial intelligence, and include skills such as predicting, checking, monitoring, and/or control of deliberate attempts to study, learn or solve problems (Brown, 1978). Many children experiencing learning difficulties do not appear to develop these skills or to use them spontaneously. However, these skills can be taught (Lewis, 1983), and this finding has given rise to programs designed to teach metacognitive and learning strategies (Alley & Deshler, 1979; Chance, 1986; Haywood, Brooks & Burns, 1990).

Thus, if children have difficulty learning, it is important to assess their understanding of their cognitive processes. Can they deliberately employ the most appropriate strategies for specific tasks? Do they realize that rehearsing information will help them remember it (*metamemory*)? Do they know that when the task is complex, it may be helpful to plan and be systematic (*meta-attention*)? If they don't appear to be using metacognitive skills, does their performance improve when they are helped to do so? Are their difficulties due to a lack of knowledge or to poor metacognitive skills?

Research on metacognition has given rise to a focus on the importance of *learning strategies*. It has been demonstrated that efficient learners actively employ various strategies to help them organize and store incoming information, while children with learning difficulties use inefficient and ineffective strategies for learning (Lewis, 1983). It has been shown that many children with apparent memory problems do not use *mnemonic strategies*. They receive information passively with no attempt to organize, relate or rehearse (Flavell, 1985; Torgesen, 1977, 1980). Deshler and his colleagues have also found that many adolescents with learning disabilities do not use strategies appropriate to specific tasks (Alley & Deshler, 1979; Alley, Deshler, Clark, Schumaker & Warner, 1983; Schumaker, Deshler, Alley & Warner, 1983). Studies have shown that these strategies can be taught (Deshler, Schumaker, Alley, Warner & Clark, 1982; Lewis, 1983; Torgesen, 1980). Assessment procedures that focus on how the child is attempting to recall information (i.e., strategies being used), and not simply on how much is remembered, give important clues as to why the child is experiencing learning difficulties. Research on reading comprehension has also highlighted the importance of using organizational strategies such as *semantic mapping* (Heimlich & Pittelman, 1986). Children experiencing comprehension difficulties often do not employ such strategies (Gillet & Temple, 1986).

In recent years, there has also been a focus on *learning* or *cognitive preferences/styles*. It has been suggested that some children have difficulty learning because of a mismatch between the mode in which the information is presented and the child's preferred style of learning (McCarthy, 1980). The traditional classroom is a highly verbal environment stressing logical

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mathematic reasoning (Gardner & Hatch, 1989), putting children who use a global, holistic or spatial style at a disadvantage. Learning preferences have been classified in many ways, including *global* versus *analytic* (Kirby, 1988), *holist* versus *serialist* (Pask, 1988), *left-brain* versus *right-brain* (Torrence & Rockenstein, 1988), *field-dependent* versus *field-independent* (Witkin, Moore, Goodenough & Cox, 1977), and *reflective* versus *impulsive* (Kogan, 1976).

While there is some research supporting each of these preferences, their value in helping students learn more effectively in the classroom has been questioned. Torrence and Rockenstein (1988) and others (see Schmeck, 1988, for a discussion of these issues) argue that there is real danger in classifying students according to their preferred style. It has been argued that higher-level learning requires the integration of styles and strategies and, therefore, effective teaching must help students go beyond their preferred styles. According to Schmeck (1988), good teaching also goes beyond just delivering content. It involves helping students focus on meaning, perceive the underlying structure of content, and relate conclusions and evidence. It encourages them to go beyond the surface level (memorization of content without understanding) to a search for meaning and relationships. The focus must be on process as well as content, and on skills as well as strategies (Kirby, 1988). Hence, assessment must go beyond the testing of facts and skills to probing the level of understanding and the ability to use the facts and skills.

Feuerstein's theory of *mediated learning experience* (Feuerstein, 1977; 1979) has given rise to an ongoing assessment and teaching approach referred to as a *mediational teaching style* (Haywood, 1987). While the terminology differs from that used by some researchers concerned with metacognition, strategies and styles, there is a similar underlying belief in the importance of teaching process and strategies, rather than just content and skills. In this approach, the teacher's role shifts from one of providing information to one of ensuring that the child is engaged in active learning. The second teacher in the dialogue with Robert uses a mediational teaching style. Through carefully worded questioning, she helps Robert think about his difficulties and resolve them himself. Her questions help Robert access existing knowledge (e.g., "What do you know about China that interests you?") and to realize the importance of planning and organization (e.g., "What do you need to do next?"). At the same time, the teacher is able to assess the source of Robert's difficulties and will know what information and/or strategies Robert might need to learn. The use of effective questions to promote learning is critical in this approach and has become a focus of research in the field of education (Gall, 1984; Morris & Fagan, 1987). The mediational teaching style has been used to promote thinking and teach learning strategies to young children with learning difficulties (Haywood, Brooks & Burns, 1986) and to teach social skills and other appropriate behaviors (Alberta Education Response Centre, 1991a).

Summary

Beliefs about how children learn influence how we teach them, how we evaluate their performance and what we do when a child encounters difficulty learning. Traditional theories of learning focused on what was learned (content) with repetition and reinforcement as primary mechanisms of learning. More recent research has stressed the importance of process -- children understanding why they are learning (meaning) and how they learn (metacognition and learning strategies). Classifying students according to preferred learning styles may have limited usefulness, because it appears that higher-level learning requires the integration of various styles and strategies.

Articulating a Philosophy of Education and Learning

It is important to develop a well-articulated philosophy of education and learning that will effectively guide your assessment programs and policies. While there is no one best philosophy, it is important that current research and thinking in the areas of learning be considered. It is important that everyone involved in the assessment process understand the belief system that guides decision-making in your school/jurisdiction. Schools that operate differently may be equally effective.

The questions in Table 8 are designed to help you evaluate your philosophy of education and learning, and to consider steps that might be taken to develop an articulated philosophy on issues that will guide teachers, specialists and others involved in the assessment of students. If you are interested in evaluating your school's philosophy, see the 1989 Alberta Teachers' Association publication, *School and Program Evaluation: A Manual for Teachers*, for additional information.

Table 8
Articulating a Philosophy of Education and Learning

1. Is there discussion and interpretation of both provincial policy and the school's or school jurisdiction's philosophy as it affects assessment and instruction?

   If you answered YES:

   a. Who is involved in these discussions?
      - administration
      - resource staff (e.g., counsellors, psychologists)
      - special education teachers
      - regular class teachers
      - parents
      - students

2. Are there formal discussions and/or inservice sessions on current views of factors affecting the education process?

   If you answered YES:

   a. Who is involved in these discussions?
      - administration
      - resource staff (e.g., counsellors, psychologists)
      - special education teachers
      - regular class teachers
      - parents
      - students

   b. What topics have been discussed?
      - the role of the family in the education process
        - what responsibilities the family has
        - what the school's responsibility is when the family is not able/willing to do its part

      - the role of culture
        - the impact of cultural differences/disadvantages on assessment and instruction
        - how the family's desires regarding cultural expectations are taken into account

      - beliefs about individual differences
        - if intelligence can be modified
        - if there are different types of intelligence
        - the school's responsibility for developing more than one type of intelligence
        - if personality factors can be modified
        - how birth/early development factors affect assessment and instruction
        - how delayed developmental milestones affect assessment and instruction

      - the learning process
        - teacher's role
        - student's role
        - motivation
        - role of self-concept
        - current theories of learning

DETERMINING YOUR PHILOSOPHY

3. **Does your school/jurisdiction have anything in writing that describes beliefs or philosophies that guide assessment and instruction?**

   If you answered YES:

   a. Is this material available to:
      - administrators
      - resource staff (e.g., counsellors, psychologists)
      - special education teachers
      - regular class teachers
      - parents
      - students

   b. Is this material reviewed and updated on a regular basis?

   c. Who has input into the review and updating?
      - administrators
      - resource staff (e.g., counsellors, psychologists)
      - special education teachers
      - regular class teachers
      - parents
      - students

If you answered NO to any of the above questions, you might want to consider:

- Having discussions about both provincial policy and/or the school's/school jurisdiction's philosophy as it affects assessment
- Planning formal discussion groups and/or inservice sessions on factors affecting the education process
- Having written statements that describe in detail the beliefs and philosophies that guide assessment and instruction
- Involving a wide range of people in all of the above.

CHAPTER 5

DECIDING WHO WILL BE ASSESSED

When planning assessments, a number of questions must be considered:

- Who will be assessed?
- Who will be involved in the assessment?
- What types of assessment procedures will be used?
- How will the results of the assessment be used?
- Who will implement recommendations from the assessment?
- Who will evaluate the benefits of program changes?

As discussed in the previous chapters, these decisions will be affected by many factors, although the primary influence should be the reason the assessment was recommended in the first place.

Stages in the Assessment Process

Table 9 illustrates the stages in the assessment process that address each of the above questions.

Table 9
Stages in the Assessment Process

Pre-referral screening and identification **Who will be assessed?**	Students or groups of students suspected of having difficulty are observed and identified
Referral and assessment planning **Who will be involved?** **What type of assessment will be done?**	Students are referred for assessment and an assessment plan is developed
Assessment	Administration, scoring, interpretation and report writing
Reporting results **How will the results be used?**	Results of the assessment are reported to concerned parties
Developing an action plan **Who will implement the recommendations?**	Plans are made to implement recommendations from the assessment
Evaluating the program plan **Who will evaluate the benefits?**	Follow-up on progress as a result of program changes

At each of these stages, there are policy and procedural decisions that must be made. This chapter will discuss some of the issues to consider in developing policies at the *pre-referral screening and identification* stage, the stage that addresses the question, "Who will be assessed?" Subsequent chapters will deal with issues and questions at the next four stages in this model: *referral and assessment planning*, *assessment*, *reporting results* and *developing an action plan*. Because of the extensive nature of program evaluation, the last stage, *evaluating the program plan*, is not discussed in this document. For information on this topic, refer to the following sources: Alberta Teachers' Association (1989), Biklen and Bogdan (1986), Borich and Nance (1987), Coomer (1986), Greene, Caracelli and Graham (1989), Herbert (1986), Judd (1987), Mark and Shotland (1987), Smith (1986), Thomas (1990) and Williams (1986).

Deciding who will be assessed is not always easy because demands for assessment often exceed available resources. Increasing awareness, on the part of the general public and parents, about the individual needs of students has come about through mass media and printed literature and has given rise to increasing demands for assessment. To receive special services, assessment may be required. In addition, many teachers may need more information on the individual needs of their students so that they can plan and evaluate effective programs.

According to Alberta Education policy, "school boards are responsible for the identification, assessment and placement of exceptional students" (Alberta Education Planning and Policy Secretariat, 1991, Document No. 02-02-01). According to the Alberta *School Act* (1988), "a board may determine that a student is, by virtue of the student's behavioral, communicational, intellectual, learning or physical characteristics, or a combination of those characteristics, a student in need of a special education program" (Section 29(1), p. 29).

Screening programs and observations of student achievement (e.g., group tests, report cards) can assist in the identification of students who might benefit from assessment.

Consider the following vignette:

A junior high teacher is particularly concerned about two girls in her homeroom class. Both are often late for school and each has missed school (on different days) without an acceptable excuse. Both girls are doing poorly in their major subject areas, not completing assignments or passing tests. Several of their subject teachers comment on their poor attitudes. The girls have been seen smoking at the bus stop after school. The teacher looks at their records from last year and finds nothing out of the ordinary. She requests a meeting with the parents of each girl.

One family immediately comes in, expresses concern and demands that the school do further assessment on their daughter to find out why she is behaving this way. They indicate that she is a "good" girl and suggest that it is somehow the school's fault.

The second family does not agree to meet with the teacher. The mother indicates over the telephone that her daughter hates school and is also very difficult at home. She holds little hope that there is anything that can be done to help her daughter. Her only suggestion is that her daughter be punished by the school. She says, "If she doesn't behave at school, just suspend her and she can work around here."

The parents of the first girl described above want an assessment and are likely to cooperate with the school. It may be that factors in the girl's environment (e.g. poor peer group) are at the root of the problem rather than more serious learning, behavior or family difficulties.

The second girl's difficulties appear more severe. The family is reluctant to come to the school to discuss their daughter's difficulties, and may not even want an assessment, if offered. The mother's comments suggest feelings of hopelessness and despair.

Several factors influence the selection of students for assessment.

Factors Influencing the Decision Regarding Who Will be Assessed

Role of the Family in the Education Process

The family of the first girl described appears to be supportive and likely to cooperate and follow-through with recommendations arising from an assessment. In addition, the family wants an assessment. This raises some important questions about the role of parents in the pre-referral process.

- Should parents have the right to request that their child be referred for an assessment?
- Under what conditions?
- Is there a process that parents can go through when they want further information on why their child is having difficulty?

The family of the second girl does not appear to be as cooperative nor to believe that much can be done for their daughter. The mother's comments suggest that the daughter's difficulties go beyond the school setting. This raises some questions with respect to family factors affecting education.

- Should the school refer a student for an assessment when the family does not want one?
- Should a referral for assessment be made when it is suspected that the family will not follow-through with the recommendations?
- Should the school do an assessment or should they refer the child/family to an outside agency that will deal with potential social/family problems? (In other words, whose responsibility is it?)

The above vignette raises some of the issues that must be considered when deciding who will be assessed. Although there are no hard and fast answers to these questions, they should be taken into consideration when developing school policies.

DECIDING WHO WILL BE ASSESSED

Consider some of the issues in the following vignette.

A school jurisdiction has implemented a new integration policy. Children encountering educational challenges, formerly in segregated classes, are now integrated into regular classes. There has been much controversy about integrating these children. Parents, teachers and students (both with and without special needs) have all expressed concerns. Parents of children without special needs believe their children are not receiving enough attention. They also worry that some children with severe behavior problems are bad role models. Parents of children with special needs are pleased about the social integration, but wonder if their children are learning as much as they did in the segregated classes.

Who Should be Assessed?

- Should all of the students in the class be assessed to ascertain if they are making adequate progress or only a subset of students?
- If a subset will be assessed, who will it include?
- Will it include students identified by the teacher as not progressing well?
- Will it include students whose parents have expressed concern?
- Should all students previously identified as having special needs be assessed?

Another important decision that needs to be made is whether these students will be assessed individually or as a group. This will be discussed further in Chapter 7, *Assessment Procedures*.

Several issues arise from identifying students on the basis of screening programs and group tests of student achievement. Recall the vignette presented in the *Introduction* (p. 3) and again in Chapter 2 (p. 39).

Questions arising from this include:

Administrators of Alphabet School Jurisdiction are concerned about the large numbers of children who appear to be encountering great difficulty in their first year of school. The teachers feel that many of these children are "just not ready for school." The administrators and teachers are interested in finding out more about the children and their educational progress.

Questions arising from this include:

- If students do poorly in screening programs, who will be referred for further assessment?
- On what grounds will that decision be made?

Alberta Education guidelines suggest that "special needs can exist in varying degrees and may or may not be considered educationally significant. The question of how great a need or how severe a handicap must be to be considered educationally significant . . . is one that each school board must address" (Alberta Education, 1987a, p. 4).

Pre-Referral and Identification Guidelines

The major player at this stage of the assessment process is the teacher. The teacher is usually in the best position to observe the student and is likely to be contacted by parents if they have concerns. It is important that teachers are conversant with policies and procedures for referral. It is also crucial that they have the skills to identify students with exceptional needs. Comprehensive guidelines, available to all concerned, will ensure that all students requiring assessment have an opportunity to be assessed. The information in Table 10 will help you develop pre-referral and identification guidelines.

Table 10
Pre-Referral and Identification Guidelines

1. Is there a policy describing procedures for identifying and referring students with exceptional needs?
   If YES:
   - Is it in writing?
   - Is it available to:
     - teachers
     - parents
     - others.
   - Are teachers and others aware of the policy and is it discussed on a regular basis?
   - Is there a process for updating this policy on a regular basis?

2. Does the policy include:
   - The type of performance that warrants further assessment?
     - Does the cut-off point vary for different students? (e.g., If a student known to have a high level of ability performs in the average range, is that a problem? If a student known to have a low level of ability performs above average, is that a problem?)
     - Is behavior a major factor in deciding when poor achievement is a problem? (e.g., if a student is failing many tests, or has scored poorly on group achievement tests, but is quiet, appears interested and hands in homework assignments, is there a problem? On the other hand, if a student is failing many tests and also displays disruptive classroom behavior, is that a problem?)
   - Procedures when a concern is raised:
     - Do teachers have a clear understanding of the procedures to be followed when they have a concern?
     - Do teachers have a clear understanding of the procedures to be followed when a parent or outside agency (e.g., social services, family physician) expresses concern?
     - Are the avenues by which parents can express concerns clear? (e.g., first speak to the teacher; if no satisfaction, arrange a meeting, with the teacher's knowledge, with the principal; if still no satisfaction, speak to the superintendent, etc.)
     - Do teachers know what they should do when they do not get cooperation from parents?

3. Are there opportunities for all teachers to receive inservice training on identification of students encountering educational challenges?

If you answered NO to any of the above questions, you might want to consider:

- Developing a written policy defining *exceptional/special needs*.
- Developing a process to communicate this and other policies.
- Developing a process to revise policies to include issues raised in #2 above.
- Providing inservice training for teachers on identification of students encountering educational challenges.

CHAPTER 6

REFERRAL AND ASSESSMENT PLANNING

Once students are identified as being exceptional, we move to the second stage illustrated in Table 9 (p. 109). At this stage, *referral and assessment planning guidelines,* the important questions are, "Who will be involved in the referral and assessment planning process?" and "What type of assessment will be done?" Let's consider again the following example from Chapter 5 (p. 111), to illustrate the process and some of the issues to consider.

> A junior high teacher is particularly concerned about two girls in her homeroom class. Both are often late for school and each has missed school (on different days) without an acceptable excuse. Both girls are doing poorly in their major subject areas, not completing assignments or passing tests. Several of their subject teachers comment on their poor attitudes. The girls have been seen smoking at the bus stop after school. The teacher looks at their records from last year and finds nothing out of the ordinary. She requests a meeting with the parents of each girl.
>
> One family immediately comes in, expresses concerns and demands that the school do further assessment on their daughter to find out why she is behaving this way. They indicate that she is a "good girl" and suggest that it is somehow the school's fault.
>
> The second family does not agree to a meeting with the teacher. The mother indicates over the telephone that her daughter hates school and is also very difficult at home. She holds little hope that there is anything that can be done to help her daughter. Her only suggestion is that her daughter be punished by the school. She says, "If she doesn't behave at school, just suspend her and she can work around here."

The Referral Process

The teacher, after discussion with the principal, decides to make a referral for assessment for both girls.

To whom does she make the referral? Is there an individual designated to accept referrals?

Let's assume that, in this school, all referrals for assessment are made to the principal. Other schools might designate a counsellor or resource teacher. What is important is that there is a key person who has the responsibility of following-through with referrals.

Is assessment warranted?

The next step is to decide if more in-depth assessment is warranted. This decision would be made through:

- discussion with the teacher
- discussion with specialist teachers
- discussion with parents
- discussion with the student
- observation in the classroom
- review of the student's file.

Information from other sources may also be gathered, such as previous assessment reports or reports written about the student by outside agencies. Before obtaining information from sources outside the school, parents must give their written permission. It is important that parents know exactly how this information will be used and that information obtained from other sources is not released to anyone other than those for whom it is intended.

Who is responsible for gathering information to make this decision?

Let's assume that, in this hypothetical case, the school counsellor has the responsibility for gathering information.

Gathering Information about Student A

The counsellor meets with the teacher to discuss Student A. The teacher reiterates her concerns. The specialist teachers express some of the same concerns. The drama and home economics teachers are surprised that this student has been referred as they have not observed any difficulties. Both comment that she is a pleasure to have in class and doing well.

Parents reiterate what they have said. They also add that their daughter seems to be overwhelmed by her homework assignments and often says she does not know what to do.

Discussion with the student indicates that she is, in fact, feeling overwhelmed. The student comments on how much work there is this year. She says she would like to do better at school but there is just not enough time to get all her homework done and be with her friends. She also indicates that she is involved in several extracurricular activities. She takes dancing classes twice a week and piano lessons. She practises piano at least two hours every day. She is also on the school volleyball team.

Observations in several classes indicate that the student is distracted by the boys around her. She is often watching them rather than paying attention to what the teacher is saying.

A review of the school file indicates that while Student A did well on her first two report cards last year, there was a steady decline toward the end of the year. A note in the file after the third report card indicates that parents had expressed concern about this and that the homeroom teacher had agreed to speak to the student and keep an eye on things. There is no indication if anything was actually done.

Gathering Information about Student B

The counsellor also investigates whether an assessment is warranted for Student B.

Discussion with the homeroom teacher indicates that Student B is often rude, refuses to answer when asked a question, talks and disturbs other students when they are working.

Specialist teachers report similar observations. The only teacher who has anything positive to say is the physical education teacher. While she, too, has noted some difficulties with compliance and cooperation, she indicates that she can usually humour the student into participating. Once she is involved in an activity (e.g., floor hockey or basketball) she will stick with it. She is a good athlete.

The student says little in the interview with the counsellor. Questions are answered with a nod or "I don't know." She does indicate that she doesn't like school. She says it is a waste of time and what she really wants is to leave home and get a job somewhere. When questioned about why she wants to leave home, she refuses to answer.

The parents again refuse to come to the school but the mother agrees to talk with the counsellor over the phone. She indicates that the daughter often stays out late and recently did not come home for two days. She says that she did not do anything because she assumed that the daughter was staying with a friend. When asked about school history, she says that school has always been a struggle for her daughter. No one in the family likes to read and her daughter is no exception.

School records indicate that throughout elementary school, Student B had difficulty with reading and written work but always "tried hard." There is no record of previous assessment or additional support provided. Last year, class test results were poor. Several teachers did express concern that the student appeared to be a slow reader and had trouble completing assignments in the time allotted.

How is the decision made as to whether to proceed with an assessment?

There are several possible ways that the decision could be made about whether to proceed. The person designated to gather information before an assessment might have the authority to decide who will be assessed. A problem with accepting decisions made by only one person is that this assumes a depth and breadth of expertise in a range of areas that no one person is likely to have. A second option is to have the designated person present the information to a team. Some school teams meet on a regular basis, others only as needed. This team may consist of the principal or designate, teachers (including resource teachers) and student services personnel (e.g., psychologist, speech and language clinician). A decision must also be made as to whether parents should be members of the team. Often, they are not involved at this stage, although the team decisions should be discussed with them.

In the above case studies, the counsellor presents the information he has gathered on each student to a team.

In the case of Student A, the counsellor suggests that before undertaking further assessment, it might be helpful if he spends some time with the student, with the goal of helping her further explore adolescent issues (e.g., her growing interest in boys) and time management. If problems persist, then additional types of assessment would be warranted.

In the case of Student B, the team agrees that further assessment would provide information needed to better help the student. There are some indications that Student B has difficulty reading. There are also concerns about behavior and family factors that may be affecting school performance.

Informing Parents

Once the decision has been made to proceed with an assessment or, as in the case of Student A, to introduce some other measures, parents are informed.

What if the parents do not agree with the team's decision?

Let's assume that the parents of Student A insist that they still want their daughter assessed. They indicate that counselling will not be enough. The parents of Student B do not want their daughter assessed at all.

Are there procedures that parents can follow to appeal a decision? Are there procedures that school personnel can follow when they believe some intervention/assistance is necessary?

The parents of Student A meet with the principal and express their concerns. The principal then arranges a meeting with the parents and the counsellor, who reviews the information gathered. This discussion convinces the parents that counselling is a first step. It is also agreed that if there is no change in Student A's performance within a specified time period (that satisfies both the parents and the school), further assessment will occur. This agreement is put in writing, signed by both parties and placed in the student's file.

Let's assume that in this example, after discussion with the principal and counsellor, the parents of Student B finally agree to an assessment.

Are there guidelines to help set priorities when there are more students being referred than there are available resources?

In the example above, there does not appear to be a problem with personnel having the time to do the needed information-gathering and assessment. However, often there are more students referred for assessment than personnel available. This may create long delays, wait lists and a need to prioritize critical cases. It is important to have a written policy on how priority decisions will be made. As with other policies, teachers must be familiar with it so that they know who to refer and also so that they can provide accurate information to parents. Guidelines for levels of assessment (e.g., consultation with teacher, observation of student, in-depth assessment) may need to be developed.

Developing an Assessment Plan

An assessment plan describes the steps and procedures in the assessment. Developing such a plan helps to ensure that:

- the data gathered will answer the relevant questions
- the data gathered will be systematically organized
- the assessment will be coordinated (i.e., everyone involved knows what to do and by when)
- the use of assessment results is clarified
- information will be appropriately stored by a certain date.

Who develops the assessment plan?

Assessment planning is best done by a team. The people on the team may be the same as those who made the decision to do an assessment. Other professionals should be added as necessary.

Recall that the purpose of an assessment is to gather information to answer educationally relevant questions. One way that an assessment plan can be developed is as a set of questions to be answered (McLoughlin & Lewis, 1990). These questions will lead to the choice of assessment procedures and to the personnel that will participate in the assessment. Questions are generally posed from the general to the specific. They should not be too general or vague, however, or they will not serve to direct the assessment in a meaningful way. For example, "Does this student have a learning disability?" is too general to be useful in planning. Questions such as "What is the student's level of oral language development?", "What is the student's approach to reading a textbook?" or "Are emotional difficulties affecting learning?" will provide specific direction for assessment planning.

REFERRAL AND ASSESSMENT PLANNING

Assessment questions may be posed regarding the following:

- knowledge and skills
- information-processing
- emotional and/or motivational factors
- curriculum requirements and other specific tasks causing difficulties
- learning environment
- physical health (e.g., vision, hearing, specific illness)
- family and social factors.

The assessment plan should also indicate who will be involved in the assessment, who will coordinate the assessment and the expected timelines.

An assessment plan for our fictitious Student B might look like the following:

Table 11
Assessment Plan for Student B

NAME:	Student B	**GRADE LEVEL:**	8
DATE OF BIRTH:	05-12-1979	**DATE:**	20-10-1992
COORDINATOR:	Mrs. Orderly		

REASON FOR REFERRAL: Underachievement in all subjects, disruptive behavior, not completing homework assignments

Assessment Question	Assessment Procedures *	Person Responsible
What is B's level of achievement in reading, written language and spelling?	Standardized Test of Reading Achievement Test of Math Achievement (curriculum-based) Written Language Test Informal Spelling Test	Resource teacher Resource teacher Teacher Teacher
What strategies is B using to comprehend written material?	Informal Reading Inventory Diagnostic Reading Test	Resource teacher Resource teacher
Are there cognitive factors affecting learning?	Problem-Solving Test Dynamic Assessment of Cognitive Functions, Cognitive Abilities Test	Psychologist Psychologist
Are there emotional factors affecting learning and behavior?	Interview Self-Esteem Inventory Personality Questionnaire	Counsellor Psychologist Psychologist
Are there family factors affecting learning and behavior?	Family Interview Parent/Child Questionnaire	Counsellor Family

Adapted from McLoughlin and Lewis, 1990

*** Test names are generic and do not refer to particular tests. Formal and informal methods of assessment can be used to gather information.**

Who will be involved in the assessment?

When planning assessments, decisions must be made about the types of professional input required to answer the assessment questions. For some types of information, one may have a choice of professionals. For example, many professionals are knowledgeable about achievement tests. Reading clinicians, resource teachers, psychologists, counsellors, and speech and language clinicians may all have the expertise to administer achievement tests or dynamic assessments of cognitive functioning. However, regardless of their professional training, they must have particular training or experience with the assessment approaches selected.

Some tests may require a trained professional. When there is no one available with the required expertise, it is necessary to obtain the services of a consultant for part or all of an assessment. **The critical issue here is that assessors must be competent to conduct the selected assessment procedures, interpret the results, write reports and communicate the results. You should become familiar with the types of tests requiring special training for assessment and interpretation.**

In the plan illustrated in Table 11 (p. 124), the involvement of four professionals (teacher, resource teacher, counsellor and psychologist) is recommended and each has a specified role. In addition, the family is included in the plan because their input is critical for answering one of the questions.

Other presenting problems might require input from other professional groups. Questions about underlying speech and language difficulties require the expertise of a speech and language clinician and an audiologist to test hearing. Fine motor difficulties, such as handwriting, would best be assessed by an occupational therapist. The family doctor could provide input on physical or medical factors affecting learning. A psychiatrist, social worker, public health nurse, day care worker, attendance officer or parole officer may also have valuable input if they have been involved with the student or the family. (Refer to Chapter 8, *Assessment Results*, for a brief discussion of ethical concerns regarding access to school records)

Referral and Assessment Planning Guidelines

Careful investigation and planning before beginning assessments will ultimately save time and ensure cost-effective, efficient and meaningful assessments. Parents and students will benefit from knowing what to expect and should be included in the planning process. It is important to have well-articulated policies and procedures at this stage of assessment. Table 12 presents guidelines for referral and assessment planning.

Table 12
Referral and Assessment Planning Guidelines

Is there a written policy regarding referral and assessment planning?
If YES, does it include the following:

1. Someone designated to accept and investigate referrals.

2. Procedure to inform parents that their child has been referred for assessment.

    - Who informs the parents?

3. The information to be gathered before assessment.

    - If information is from an outside source, does the school have permission in writing from the student's legal guardians?

4. A designated team that makes the decision about whether further assessment is warranted.

    - Who informs the parents about the team's decision?
    - Is there a policy that informs parents about what they can do if they disagree with the team's decision?

5. Guidelines that help set priorities when more students require assessment than the resources permit.

6. A policy regarding assessment planning.

    - Who will be involved?
        - teacher
        - resource teacher
        - counsellor
        - specialists
        - student services staff
    - Who will coordinate the assessment plan?
    - What is the policy if competent personnel are not available to do part or all of the assessment?
        - Is there supervision available when personnel are learning new tests, approaches etc.?
        - Are there professional development opportunities available for staff to learn new approaches?
        - When are outside consultants asked to provide part or all of the assessment?
    - Are parents informed about the assessment plan?
        - Is there a procedure to follow if they disagree with part of the plan?

If you answered NO to any of the above questions, you may wish to consider:

- Developing a written policy regarding referral and assessment planning.

- Developing a process to revise policies to include the points raised above.

CHAPTER 7

ASSESSMENT PROCEDURES

To many people, *assessment* is synonymous with *testing*. In this chapter, testing will be discussed within the broader context of assessment. Consider the following fable:

The Blind Man and the Elephant

> Six blind men wanted to discover what an elephant was like. Each felt part of an elephant with his hands. The first blind man felt the side of the elephant and concluded that an elephant was like a wall. The second felt the trunk and thought an elephant was like a snake. The third felt the tusk and was sure an elephant was like a spear. The fourth felt a leg and believed an elephant was like a tree. The fifth touched an ear and was convinced an elephant was like a fan, and finally the last blind man put his hands on the tail and judged that an elephant was like a rope. Then a huge disagreement arose among the six, each arguing that he knew exactly what an elephant was like. Finally a wise man told them that they must put all the parts together to find out what an elephant was really like. (Quigley, 1959)

What parallels can be drawn between this old fable from India, and assessment? This analogy emphasizes the need for using various types of assessment procedures to obtain an accurate and comprehensive view of a student (Walkenshaw & Fine, 1979). Just as the blind men gathered information about an elephant through their sense of touch, we use different types of assessment procedures to collect information about processes we cannot see (e.g., attention, memory). The procedures selected depend on the purpose of assessment.

Ideally, assessment is an ongoing, hypothesis-creating activity of inquiry, deduction, planning and evaluation. There is no single correct approach, because students and environments are always changing. Thus, no single set of procedures will be sufficient. The assessment process must always be flexible, depending on the student or students involved. The choice of procedures will be influenced by various factors, including the nature of the specific questions asked, the classroom context and the availability of particular professionals.

ASSESSMENT PROCEDURES

Chapter 7 provides a review of commonly used assessment procedures. Specific tests and other instruments will not be recommended. Rather, some general principles and concepts will be discussed. New assessment devices are continually becoming available and it is helpful to be able to evaluate whether these and other approaches can meet specific needs.

Types of Assessment

Different assessment tools are needed to gather different kinds of information. Consider the questions in Table 13:

Table 13
Assessment Alternatives Quiz

Choose from the alternatives listed below the type of assessment tool that would best answer the following questions:

Place Letter Here	
	1. At *approximately* what grade level is the student reading?
	2. How does the student's achievement in mathematics compare with others of the same age?
	3. Does the student have the foundation skills necessary to learn a new mathematical skill?
	4. What types of errors is the student making in written language?
	5. How intelligent is the student?
	6. Are there metacognitive factors affecting the student's ability to learn?
	7. Are there emotional factors interfering with learning?
	8. How can I evaluate the progress a student has made this year in my class?

ASSESSMENT TOOLS

A Work sample analysis
B Criterion-referenced test
C Psychosocial interview
D Dynamic assessment
E Norm-referenced test
F Standardized psychological test
G Informal reading inventory

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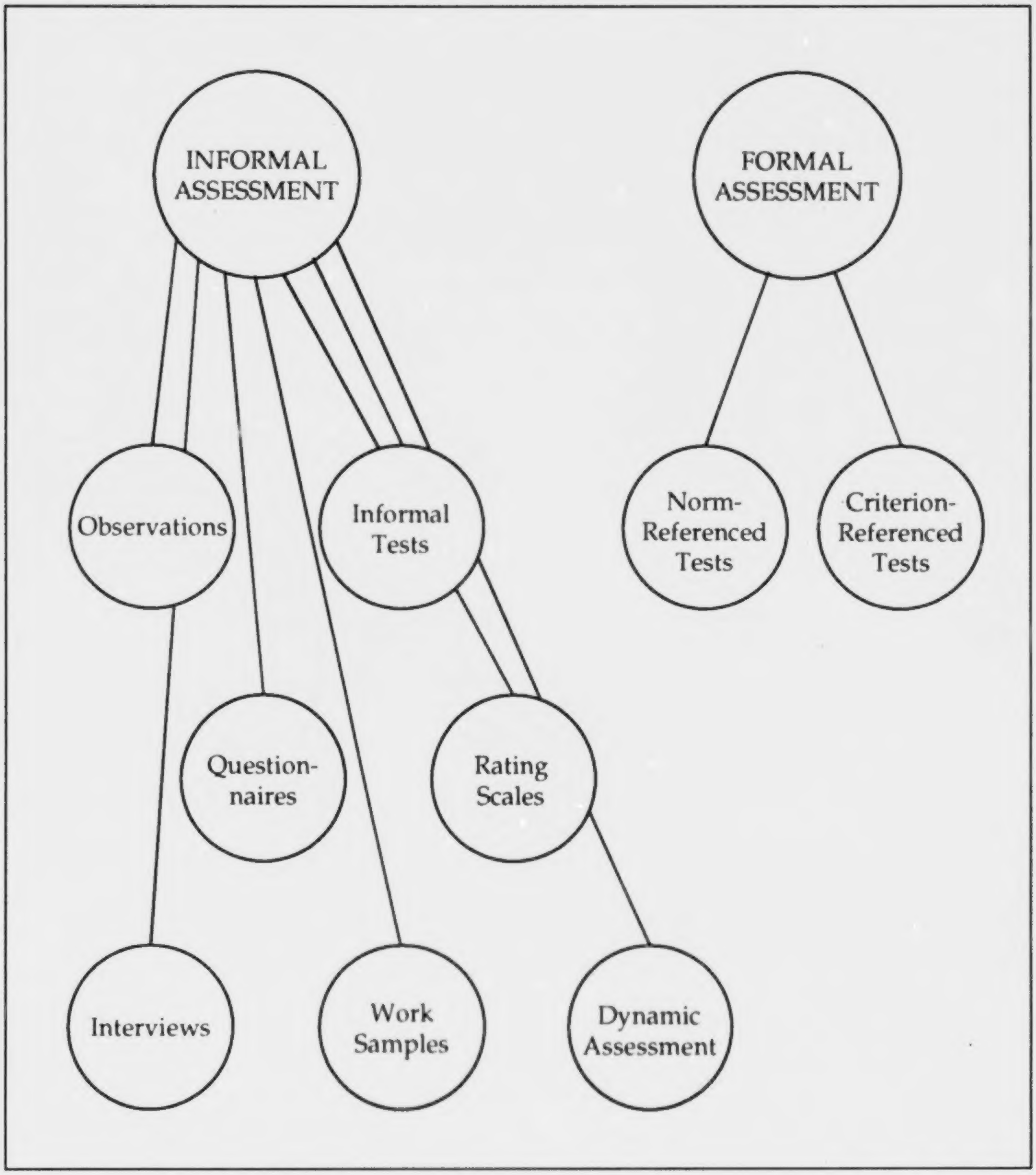
Answers to this quiz are in provided in Table 14.

Table 14
Answers to Assessment Alternatives Quiz

QUESTIONS	ANSWERS
1. At approximately what grade level is the student reading?	G Informal reading inventory
2. How does the student's achievement in mathematics compare with others of the same age?	E Norm-referenced test
3. Does the student have the foundation skills necessary to learn a new mathematical skill?	B Criterion-referenced test
4. What types of errors is the student making in written language?	A Work sample analysis
5. How intelligent is the student?	F Standardized psychological test
6. Are there metacognitive factors affecting the student's ability to learn?	D Dynamic assessment
7. Are there emotional factors interfering with learning?	C Psychosocial interview and/or D Dynamic assessment
8. How can I evaluate the progress a student has made this year in my class?	B Criterion-referenced test

This quiz introduces some of the types of assessment that may be chosen to answer specific questions. The alternatives involve both informal and formal assessment approaches (see Figure 2).

Figure 2
Assessment Alternatives


INFORMAL ASSESSMENT
FORMAL ASSESSMENT
Observations
Informal Tests
Norm-Referenced Tests
Criterion-Referenced Tests
Question-naires
Rating Scales
Interviews
Work Samples
Dynamic Assessment

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Informal Assessment Procedures

Informal assessment procedures are an important part of assessment, often as a first step in gathering information about a student. They may also be used to validate and supplement *formal assessment* results.

Informal assessments are usually less structured than formal ones. There is an element of subjectivity in their administration, scoring (if needed) and interpretation. Although informal assessments do not provide the specific scores that can be obtained through formal assessments, the information that can be gathered can be extremely relevant for instructional purposes (McLoughlin & Lewis, 1990).

Informal assessment procedures include the following: observations, work samples, interviews, informal tests, questionnaires, rating scales and dynamic assessment. Some of these procedures engage the student directly while others rely on information from individuals involved with the student (e.g., parents, teachers).

- **Observations**

  Observations may provide information about how a student interacts in various environments and with various people. Decisions must be made about who will observe, where and when an observation will take place, and how the results will be recorded. In order to obtain a valid sample of behavior, it is advisable to do a number of observations in different environments (e.g., classroom, playground) on different days. It is crucial that observers be aware of the possible biasing influence of personal beliefs and values. There is a tendency to watch for information that confirms personal expectations (Wallace & Larsen, 1978).

Observations can be structured or unstructured. In an unstructured observation, the observer makes notations of behaviors believed to be important. In a structured observation, one or two specific behaviors are identified and then recorded in terms of frequency, magnitude or duration. This type of structure can help overcome observer bias. Behavior checklists containing a list of expected behaviors, characteristics and/or desirable attributes can help structure observations, particularly when specific behaviors are being targeted (Cartwright, Cartwright & Ward, 1984). A yes/no format is typically used in checklists. A great deal of information can quickly be recorded in this way.

There are commercially-available checklists targeting particular behaviors, and these can be comprehensive and helpful. *Teacher Alert System* (Alberta Education Response Centre, 1991b) and *Teacher Intervention Practices* (Alberta Education Response Centre, 1992) contain checklists designed to help teachers identify various types of difficulties and select appropriate interventions.

- **Work Samples**

Examples of typical classroom work provide valuable information about correct and incorrect responses (number, type and patterns of errors), the amount of work produced, organization and neatness. A number of samples taken from various subject areas and on different days will provide a good cross-section of a student's classroom work. It is important to interpret work samples in the context of the numbers and types of typical errors made by other students as well as the expectations of individual teachers.

- **Interviews**

Some information may best be gathered through interviews with students and their families and teachers (and others, if appropriate). An interview provides an opportunity to gather information that may not be otherwise easily accessible, particularly the perceptions of each interviewee. Good interview skills are required to ensure that accurate information is obtained and recorded, and that interviewees have the opportunity to express their opinions and feel that their input is valuable.

- **Informal Tests**

Informal tests may be either teacher-made or commercially-available. A student might be tested on materials used for classroom instruction (reflective of the curriculum). The teacher may decide to develop a curriculum-based assessment, which is used to determine the instructional needs of students, based on their performance in specific subjects.

Informal tests can be more difficult to interpret than formal tests because of a lack of guidelines. However, because they are not standardized, it is possible to tailor the format, timing and administration of tests to the needs of particular teachers/students.

- **Questionnaires**

Questionnaires may be completed before and/or during interviews and may also be used to obtain information from people not easily accessible to schools (e.g., physicians). Questionnaires may be teacher-developed or commercially-available (e.g., *Pediatric Examination of Educational Readiness*). It is important that the information requested is relevant to the assessment.

It is also important that parents are informed about the use of questionnaire results and that their written permission is obtained before information is requested from outside sources (e.g., physicians).

- **Rating Scales**

Rating scales are designed to be filled out either by the student (e.g., self-esteem inventories in which the student rates how a particular statement applies to him/herself) or by someone who is involved with the student (e.g., *Connor's Parent-Teacher Rating Scale*). The quality or frequency of behavior or performance is generally rated on a three- to five-point scale. The quality of data depends on such factors as the precision of the rating scale design and the ability of the rater to give an accurate, unbiased opinion. To help overcome bias, multiple raters are often used (McLoughlin & Lewis, 1990).

- **Dynamic Assessment**

A rapidly expanding area of interest for those who carry out assessments is *dynamic assessment* -- an approach with a broad underlying philosophy of assessment. Dynamic assessment is a process in which teaching occurs in the testing situation (Missiuna & Samuels, 1988). It is an interactive, intervention-oriented approach that is most frequently administered in a test-intervene-retest or intervene-test format (Lidz, 1991). Although it has been primarily been used for assessment of cognitive functioning, it is also used in curriculum areas (Cioffi & Carney, 1983; Campione, 1989).

During dynamic assessment, both the assessor and the learner are active. The assessor varies his/her interactions with the student to induce successful learning. The focus is on the process, rather than the product, of learning, with the assessor seeking to discover the learning potential of the student. Testing proceeds according to a student's individual needs (Lidz, 1987). A major difference between dynamic assessment and standardized assessment is the type of information gathered. In standardized assessments, the instructions and input during testing are kept constant and the results focus on variations in student performance. In a dynamic assessment, the variables of interest are the amount and type of input needed by the student to perform effectively.

Dynamic assessment is not intended to replace other assessment procedures, but rather to allow a more complete picture of a student's abilities and cognitive processes. It allows the examiner greater flexibility in interactions with a learner and may be especially useful with students suspected of not performing up to their full potential. As with other informal assessment procedures, the results are influenced by the skills of the assessor. There is a shift in emphasis from suggesting that a student is unable to do something, to suggesting that an assessor is unable to find a way to teach the student. This type of assessment requires special training to ensure accurate interpretation. However, it shows excellent promise for understanding the individual needs of students and has been promoted as an effective assessment approach for use with students from different cultures (Cummins, 1987).

The informal assessment procedures described above can often provide information that is not provided by formal tests. The flexibility of the various procedures permits assessment of a wide variety of student behaviors. Informal procedures allow freedom in administration and interpretation, and can be used frequently. They can often be done during regular classroom time and are much less expensive than formal tests (Lerner, 1985). Because informal procedures are not normed, the interpretation of results depends on the skills of the assessor. These procedures are more subjective and are affected by bias. Table 15 summarizes the informal assessment techniques described in this chapter and describes their relationship to instruction.

Table 15
Informal Assessment Techniques

Assessment Technique	Description	Relation to Instruction
Informal Tests	Direct measure of student performance in specific curriculum areas	Direction for planning and/or modifying instruction Documentation of student progress
Observations	Direct measure of student behavior	Determination of present levels of performance Documentation of student progress
Work Samples	Evaluation of student performance to locate pattern of errors and correct responses	Direction for selection of appropriate criterion-referenced tests Directions for instructional modifications Documentation of student progress
Checklists, Rating Scales, Interviews and Questionnaires	Evaluation of student performance based on the accumulation of past experiences with the student Indirect measure of student attitudes	Estimation of present levels of performance Direction for further assessment
Dynamic Assessment	Evaluation of student performance based on test-intervene-retest interaction	Direction for planning and/or modifying instruction

Formal Assessment Procedures

Formal assessment refers to the use of standardized tests -- tests with uniform directions given under standard conditions (Walkenshaw & Fine, 1979). Unlike informal tests, formal tests have strict guidelines for administration, scoring and interpretation and often have time constraints.

Both formal and informal tests are used frequently in schools. They are used to identify students experiencing problems, to aid in program planning, to evaluate the effectiveness of instructional programs and to measure student progress.

There is a wide array of commercially-prepared tests on the educational market. It is important to select tests that will provide meaningful information and to avoid buying a test just because it is heavily advertised. This section will review some of the terminology and key issues to consider when selecting, purchasing and/or using tests.

As stated earlier in this manual, the particular tests used should be guided by the purpose of the assessment and by the questions posed by the assessor. Testing is a technique for gathering information, and it is essential to consider what information is needed to determine whether the appropriate test is being used. If a test is used for a purpose for which it was not designed, the results, and any decisions based on those results, are questionable (Ysseldyke, Algozzine & Thurlow, 1992).

According to Compton (1984), test selection should be based on the following criteria:

- Does the test answer the questions asked?
- Is the standardization sample (norms) appropriate for the student being tested?
- Is the test valid?[2]

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[2] Validity is discussed on pages 142-144 of this manual.

- Is the test reliable?[3]
- Are the design and format appropriate for the student(s) being tested?
- Is the content or skill area being measured appropriate for the age and grade of the student(s)?
- Is the test economical in terms of time and money?

There are two types of standardized tests: *norm-referenced* or *criterion-referenced*. Table 16 (p. 142) provides a brief description of each type and its relation to instruction.

- **Norm-referenced tests**

A norm-referenced test measures inter-individual differences, and compares a student's performance to that of some known group (norm). These tests yield information in percentile ranks, stanines, standard scores, age and/or grade equivalents. A scoring manual that gives information regarding statistical validity and reliability comes with the test. It should also provide information on the group used to establish the norms for the tests.

The make-up of this normative group is critical because it is the performance of the normative group that is used to judge the quality of the individual performance. These groups should represent the population on whom the test will be used (Cartwright, Cartwright & Ward, 1984).

When using a norm-referenced test, there is an underlying assumption that the person being tested has had similar background experiences and opportunities as those of the normative group (Winzer, 1989). Often, this assumption is not met, particularly in special education, as many tests used in this area have been normed on "normal" children and do not include minorities and disabled children in the same proportion as they appear in the general population. As well, many tests used in Canada have been normed on American populations, which limits the comparison value (Bateson, 1989).

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[3] **Reliability is discussed on pages 144-145 of this manual.**

- **Criterion-referenced tests**

A criterion-referenced test compares a student's performance to some predetermined level of mastery rather than to the performance of a normative group. These tests indicate what a student can or cannot do (the degree to which a skill or material has been mastered) and describe a student's performance in terms of specific behaviors demonstrated. It is important know how the criteria, or level of mastery, was set. A criticism of criterion-referenced tests is that the establishment of the criteria, or level of mastery, is often an arbitrary decision. Because of this, test results should be interpreted in the context of the curriculum taught.

It should be noted that some criterion-referenced tests are normed (e.g., *Woodcock Reading Mastery Test*) and some criterion-referenced tests are classified as informal tests (e.g., *Brigance Diagnostic Inventories*).

Table 16
Formal Assessment Techniques

Assessment Technique	Description	Relation to Instruction
Norm-Referenced Tests	Direct measure of student performance on specified tasks under specific conditions to compare student's performance to norm	Estimation of present level of performance in relation to others Gives direction for further assessment
Criterion-Referenced Tests	Direct measure of student's performance on specific tasks under specific conditions with specific criteria for success	Determination of present levels of performance in relation to a standard Documentation of student progress

Test Terminology

An understanding of the following key terms will assist in making wise decisions when selecting and/or purchasing tests.

Validity

One issue to consider when selecting a test is whether the test is *valid*. Does it actually measure what it claims to measure? Although language is an important aspect of assessment in problem-solving, if a math test has questions embedded in long paragraphs of unclear text, is the test truly testing math abilities or will the difficult reading component affect some students' scores? If a test lacks validity, the information it provides may be useless (Hopkins & Stanley, 1981).

There are several types of validity to consider when selecting a test:

- **Content validity**

Content validity is concerned with the extent to which a test is an adequate sample of the attribute, trait or skill assessed and the appropriateness of the items included in a test (Witt, Elliott, Gresham & Kramer, 1988). This is probably the most important type of validity for teachers, as they want a test to reflect what they have taught. For example, if an upper elementary class were given a math test that contained no division or word problems, or asked questions using inches and feet (instead of the metric equivalents), the test's content validity would be questionable. According to Salvia & Ysseldyke (1985), "content validity is a major component of the validation process for any educational and psychological test" (p. 134).

- **Criterion-related validity**

Criterion-related validity refers to the relationship between test scores and other types of criteria or outcomes, such as ratings, classifications or other test scores (Swanson & Watson, 1989). If, for example, there is little correspondence between scores on a year-end math test and performance in math class and scores on other math tests, the criterion-related validity of the year-end test would be questionable.

- **Construct validity**

Construct validity refers to the extent to which a test measures a theoretical or inferred trait or characteristic. For example, intelligence is a construct. When we interpret test scores as measures of intelligence, we are implying that there is a quality called *intelligence* and that this quality can be measured by that test (Gronlund, 1981). It is important to examine tests and read the accompanying manuals to ascertain the theoretical basis for a test. You may not agree that a test purported to measure intelligence, memory or some other construct is, in fact, doing so.

- **Predictive validity**

  Predictive validity refers to the extent to which a test predicts some future measurement or behavior based on the current test or observation. For example, students may be given a test to predict future success in law school. Predictive validity could be determined by comparing test scores with later performance in courses taken in law school. Caution must be exercised when choosing a test for predictive purposes (e.g., law school readiness test) to ensure that the test scores are related to the future behavior being predicted (e.g. success in law school).

Reliability

Reliability is a measure of consistency. A test is reliable if it gives the same results on different occasions. For example, if a person stood on a scale each of three days in a row and it read 110 pounds each day, the reading would be reliable. If, however, the person actually weighs 135 pounds, the scale's reading is not valid. Thus, reliability is related to validity: a test can be reliable without being valid, but cannot be valid unless it is reliable.

There are several types of reliability to consider when selecting a test:

- **Interrater or interscorer reliability**

  This assumes that if another tester were to score the exam, the results would be the same.

- **Test-retest reliability**

  This assumes that if a student were tested on two different occasions with the same test, usually within a short period of time, the results would be similar.

- **Alternate form reliability**

This type of reliability assumes that the same test score would be obtained if comparable test questions were administered (Salvia & Ysseldyke, 1985). It is a useful measure when alternate test forms will be given as pre-test and post-test measures or when each half of a group of students will complete alternate forms of a test.

- **Split-half reliability**

This type of reliability refers to the extent to which tests are internally consistent. It tells how scores on half of the questions on a test are related to scores on questions on the other half of the test. This measure is useful if one wants to administer half a test because of time constraints or to give half the test as a pre-test measure and the other half as a post-test measure.

Information about test reliability is usually provided in test manuals. Salvia & Ysseldyke (1985) recommend a minimum reliability of .60 for group data used for administrative purposes (e.g., program evaluation), .80 for individual data that influence screening decisions (e.g., referral for further assessment) and .90 for individual data considered for important decisions (e.g., tracking, placement in special programs).

Test Scores

It is also important to consider the form in which test scores should be reported. Scores from commercially-prepared tests are often reported in a variety of forms: *percentile ranking*, *standard scores*, *stanines*, *age equivalents* and *grade equivalents*.

- **Percentile rank**

A percentile rank indicates a student's relative position within a normative group. The 50th percentile is the middle (or median) score, and as a score becomes higher numerically, the student's performance is considered to be better. A score at the 81st percentile indicates that the students has performed equal to, or better than, 81% of the norm group.

- **Standard scores**

Standard scores are based on the *mean* (average) and *standard deviation* (variation from the mean) of the normative sample. For example, the *Wechsler Intelligence Scale for Children* (WISC-III) and the *Wechsler Preschool and Primary Scale for Children* (WPPSI) both have a mean of 100 and a standard deviation of 15 points. Scores that fall within one standard deviation above or below the mean (85-115) are considered to be in the average range. Raw scores are converted to standard scores and the same raw score will yield a different standard score depending on the student's age.

- **Stanines**

Stanines represent a range of performance rather than a specific score. The scores are expressed as a whole number from 1 to 9, with 5 representing the middle 20% of scores.

- **Age and grade equivalents**

Age and grade equivalents, the most popular form of reporting scores, unfortunately tend to be misleading and are often misinterpreted (McLoughlin & Lewis, 1990; Salvia & Ysseldyke, 1985). For example, if a sixth grade student receives a grade equivalent score of 8.5 on a math test, this does not mean that the student has the math skills of an eighth grader, but rather that he/she performed better than the average sixth grade student. The score of 8.5 is only an estimate. The test may not have been normed on any eighth grade students. The scales used for age and grade equivalent scores are not equal-interval scales. Thus, it may take six correct answers to go from a score of 6.0 to 6.5, but only two correct answers to go from a score of 8.0 to 8.5. In addition, grade equivalent scores are not comparable across different tests or across subtests within the same test battery (Bateson, 1989).

Because of the many problems with age and grade equivalent scores, they should be reported and interpreted with caution.

Teachers and parents should be aware that scores from one test cannot be equated with scores obtained on a different test. For example, if a group of students was given a math test and one student scored at the 25th percentile on one test and at the 36th percentile on a different test, it does not mean that the student's math skills have necessarily improved from one test to the other, or that the first test underestimated his/her abilities. It could simply reflect the fact that the second test was normed on a different population than the first test and there is not a very strong relationship between the tests.

Direct comparison of scores from different tests is also complicated by *error in measurement* -- we can always assume that some error will be present (Salvia & Ysseldyke, 1985). Measurement error can be quantified by a statistic (the *standard error of measurement*), thus establishing a *confidence interval*, which is a range of scores within which it is likely that a true score falls. According to Berdine and Meyer (1987), it is impossible to know a true score because we don't know all of the chance factors that may affect test performance (e.g., fatigue, poor lighting, inattentiveness). This point underscores the importance of basing placement, programming and other treatment decisions on multiple sources of information (e.g., observation, informal testing). **Test scores are only one source of information and should never be used in isolation when making decisions.**

Types of Tests

There are a variety of types of tests, including intelligence tests, academic tests (achievement and aptitude), developmental tests, cognitive processing tests, affective tests, speech and language tests (oral and written) and vocational tests. These categories are somewhat arbitrary because authors use various headings for types of tests, and some tests fit into more than one category.

Intelligence Tests

Intelligence tests are intended to provide an indication of an individual's general mental capacity. They usually include a wide variety of tasks and typically provide a single *Intelligent Quotient* (IQ) score. The most commonly-used test is the *Wechsler Intelligence Scale for Children* (WISC-III). There has been much controversy about intelligence testing, partly because *intelligence* is defined differently by various psychologists and the term has no absolute meaning. Intelligence testing has also been criticized because the scores are often unrelated to measures of everyday functioning (Sattler, 1988). According to Hopkins and Stanley (1981), a great deal of care must be taken when interpreting IQ scores, especially from group tests. Intelligence tests tend to measure verbal, logical and analytic abilities. There are many other cognitive abilities that can legitimately be considered to reflect intelligence (e.g., written expressive language) and untapped special abilities (e.g., creativity, intuition).

Intelligence tests must be administered and interpreted by psychologists who have had adequate training and supervision, and the appearance of new tests on the market may necessitate further training and supervision.

Academic Tests

Academic tests include achievement tests and aptitude tests.

- **Achievement Tests**

Achievement tests can be subdivided into screening devices (e.g., *Peabody Individual Achievement Test*) and diagnostic devices (e.g., *KeyMath Diagnostic Arithmetic Test*). As Salvia and Ysseldyke (1985) explain:

> Screening devices are used to estimate a student's current level of functioning and the extent to which that individual has acquired the skills that most other students of the same age have acquired. Diagnostic achievement tests provide a much finer analysis designed to pinpoint strengths and weaknesses in skill development. (p. 297)

Achievement tests must reflect the content of the curriculum students are studying. Otherwise, they provide misleading information. For example, if students are instructed in new math concepts, but tested on traditional math concepts, their scores will not accurately reflect their learning (Salvia & Ysseldyke, 1985).

- **Aptitude Tests**

An aptitude test measures potential to learn or succeed in school, at a vocation, or in an artistic endeavour. It is intended to assess a student's potential to profit from instruction in specific areas (Salvia & Ysseldyke, 1985).

There is overlap between achievement tests and aptitude tests. Although the former are supposed to assess a student's present level of knowledge or skills, and the latter are intended to measure ability to learn new tasks, this distinction is not clear-cut.

Both aptitude and achievement tests reflect developed abilities and tap into past school learning (Hopkins & Stanley, 1981). Both can provide information for educational programs.

Developmental Tests

Developmental tests, often referred to as *screening devices*, are concerned with academic and social readiness. As explained in Chapter 2, *Definition and Purpose of Assessment*, screening for school readiness is a controversial practice and caution is advised. There is such variation in the experience and performance of preschoolers that these tests have poor predictive validity (Salvia & Ysseldyke, 1985; Swanson & Watson, 1989). As mentioned in Chapter 5, *Deciding Who Will Be Assessed*, another consideration before administering screening tests relates to decisions regarding further assessment of students who do poorly, or exceptionally well, on such tests.

Cognitive Processing Tests

Cognitive processing refers to the processes of knowing and thinking. Cognitive processing tests go beyond intelligence or achievement tests and assess how students think and problem-solve, rather than what they know. Cognitive operations include the following: judgment, comparison, calculation, inquiry, reasoning, evaluation, critical thinking, concept formation, problem-solving, decision-making, attention and memory (Kirk & Chalfant, 1984; Wallace & McLoughlin, 1988). Cognitive processing is a complex area that requires assessment measures that go beyond standardized tests. The dynamic assessment procedures discussed earlier in this chapter have been suggested as effective tools for assessing cognitive processing (Campione, 1989). However, there are also some standardized tests that assess cognitive processing (e.g., *Test of Diagnostic Arithmetic Strategies, Test of Problem-Solving*).

Affective Tests

Affective tests (e.g., projective techniques, self-reports, rating scales, checklists) may be used to supplement subjective assessments of students' affective behaviors (e.g., social skills, self-esteem, personality). Interpretation is the primary concern. According to Hopkins and Stanley (1981) there are unique assessment problems in the affective domain. They suggest that responses are easily faked, vulnerable to self-deception and often lacking in definite external criteria. Affective tests should be administered and interpreted by people with expertise. For example, projective tests must be administered by psychologists trained in their administration and interpretation. Psychiatrists may also play an important role in assessing affective/emotional difficulties.

Speech and Language Tests

Language tests can be subdivided into oral and written types. Language is the core of almost all learning in schools and various language abilities and processes are believed to underlie subsequent development.

- **Oral Language**

Oral language involves many interrelated components and a student might experience difficulties in one or more of the following areas: inner language, receptive language and/or expressive language (Wallace & McLoughlin, 1988). It is important to know what types of language specific tests are designed to assess. For example, the *Peabody Picture Vocabulary Test* tests receptive rather than expressive language. An assessor must also be aware that a student's cultural background may affect language. For example, a student might ask, "Where are you to?" rather than the more standard, "Where are you going?" This and other culturally determined linguistic forms and pronunciations "are not incorrect or inferior, they are just different" (Salvia & Ysseldyke, 1985, pp. 240-241). There are many standardized tests of language functioning available. While some may appear easy to administer, they should be interpreted by an experienced speech and language clinician.

- **Written Language**

Written language requires that we observe certain conventions and rules. Tests are used with students who exhibit difficulties in various aspects of written language including spelling, punctuation, grammar, word usage and penmanship. When using a test, the assessor must make sure that there is a match between what has been taught in school and what is being tested (Wallace & McLoughlin, 1988). Difficulties in handwriting may require the services of an occupational therapist. Poor handwriting may be a serious impediment to school success -- studies have shown that students with poor handwriting receive lower marks on assignments regardless of the content (Briggs, 1980).

Vocational Tests

Vocational tests are concerned with general aptitude and work/study habits, as well as interests and skills for specific occupations. These tests cannot predict who will actually succeed at a job, because motivation and drive are difficult, if not impossible, to measure (Swanson & Watson, 1989). Vocational tests should be interpreted by a trained counsellor. Caution must be used so that students are not denied opportunities on the basis of test results.

Issues in Group Administration

Some formal assessment devices are designed to be administered individually (e.g., *WISC-III, KeyMath*) while others can be given to a group (e.g., *Canadian Test of Basic Skills*) Group tests save time but may not provide an accurate description of a student's skills or abilities. Some authors feel that group tests penalize some exceptional students because these tests require skill in reading and following directions and are often timed (McLoughlin & Lewis, 1990).

When a student performs exceptionally well, poorly, or differently than expected based on other sources of information, the assessor should follow-up with individual testing. Individual tests may provide a student with more opportunity to demonstrate skills. The examiner can help the student relax, provide breaks, clarify instructions and encourage the student to continue. The assessor also has an opportunity to observe a student under specified conditions (Compton, 1984).

If follow-up using individualized standardized tests does not provide information about why a student is having difficulty, then informal measures should be used. Dynamic assessment, along with other informal procedures, will provide further information about students' strengths and limitations.

Test Bias

Another factor that affects test scores is *bias*. Systematic overestimation or underestimation of a particular subgroup of persons suggests bias. Bias may be due to background characteristics, faulty test construction, examiner-induced variations, unknown influences or, more likely, the interaction of several variables (Sabatino, Miller & Schmidt, 1981). Some tests, by their very nature, are biased against members of minority groups (Ysseldyke, Algozzine & Thurlow, 1992). Bias can also be part of test administration; placing a standardized test in the hands of an untrained examiner is considered poor practice.

Even given a fair test, there can be bias in decision-making. Ross and Salvia (1975) examined how a student's physical attractiveness affected teachers' decisions. They gave the same written report, with different pictures attached, to teachers and asked the teachers to evaluate the students' reports. Although identical information was received, the evaluations were negatively affected by a student's unattractive appearance. Thus, bias, even though often unintentional, remains a possibility during test administration, scoring and interpretation (McLoughlin & Lewis, 1990).

Summary

A wide variety of procedures should be used for a comprehensive assessment. Informal assessment measures include the following: observations, work samples, interviews, informal tests, questionnaires, rating scales and dynamic assessment. Formal assessment measures include the following: standardized norm-referenced and criterion-referenced tests. Some of the advantages of formal assessment devices are that they are widely available, relatively easy to administer and give information on a student's relative standing. However, there are concerns about the sole use of formal devices to assess exceptional students. Because of the influences of factors such as the norming process, test demands (e.g., reading, time limits), cultural bias, and reliability and validity, standardized tests should be used with caution. If concerns arise, standardized tests should always be followed-up with informal measures.

ASSESSMENT PROCEDURES

The selection of assessment procedures depends on many factors, including previous training, experience and time constraints. The purpose of the assessment will be a prime consideration. An assessor should relate to each student as an individual and use the procedures that will provide the best answers to the questions posed. Table 17 presents questions to consider when choosing assessment tools and procedures.

Table 17
Guidelines for Choosing Assessment Procedures

1. Are the assessment procedures (e.g., rating scale, test) appropriate to the questions posed?

2. Is a variety of assessment procedures being used for a comprehensive assessment?

3. Are procedures valid?

   - Is the assessment device measuring the attributes, traits, skills in question?
   - Do the assessment results relate to other information about the student (e.g., classroom work, playground observations)?
   - Does the device/procedure assess what it purports to assess (e.g., intelligence)?
   - Is the device/procedure predictive of the behaviors in question?

4. Are procedures reliable?

   - Will another tester get similar results?
   - Will results be similar if you assess the student again?
   - Will results be similar with another form of the test?

5. Are test scores and other key concepts properly understood?

   - Are there professional development opportunities for teachers to learn about these?
   - Are parents informed about what scores mean (e.g., grade equivalents)?

6. When group administration is used, are there procedures for follow-up on students who score poorly?

7. Are teachers and others aware of how test bias can affect all phases of assessment?

8. Are there professional development opportunities available for teachers and others on assessment procedures and test bias?

If you answered NO to any of the above, you may wish to consider:

- Developing a written policy for choosing assessment procedures.

- Providing inservice training for teachers on assessment procedures.

CHAPTER 8

ASSESSMENT RESULTS

This chapter will discuss issues to consider in the recording and reporting of assessment results. The issues differ depending on the purpose of assessment and whether the assessment involves an individual student or a group of students.

Assessment Conferencing

Following an individual assessment, all team members involved in the assessment should share their results. This is usually done at a post-assessment conference including the parents and, where appropriate, the student.

Recall the example, developed in Chapters 5 (*Deciding Who Will Be Assessed*) and 6 (*Referral and Assessment Planning*), of the junior high school student who was experiencing both school and family difficulties. An assessment plan was developed in which specific questions were posed. This plan may form a basis for the reporting of results. While some reorganization of the plan may be necessary following the assessment, focusing on answering the original questions during the meeting will help ensure that it is productive.

Studies on the effectiveness of team meetings have revealed that few meet the requirements of an effective meeting (Ysseldyke, 1983; Ysseldyke, Algozzine & Mitchell, 1982).

These requirements include the following:

- A clear statement of the purpose of the meeting.
- A clear definition of the role of each team member.
- Equal participation of all team members (including teachers, parents and students).
- Input of all team members is equally valued.
- Clear plans and decision-making.

The family plays a crucial role in the education process and it is important that good rapport between parents and the assessment team is established and maintained throughout the assessment process. If possible, both parents should be present at the post-assessment conference to increase their understanding and participation in the implementation of recommendations. Single parents may find it helpful to bring a supportive relative or friend so that the parent will have someone with whom to clarify meanings and discuss issues and concerns. Sattler (1988) provides guidelines for involving parents in interviews and conferences.

Assessment Reports

The assessment plan provided in Chapter 6, *Referral and Assessment Planning* (p. 124), may be used as a guide for organizing a written report of test results and recommendations. Recall that this plan specifies the questions that are being investigated, the procedures that will be used and the person who will be responsible for each of the procedures. Specifying the questions to be answered has been found to be an effective way of organizing reports (Humphreys, 1990).

Some points to consider in report writing are:

- Reports should be short and to the point (three to five pages maximum).
- Reports should be written in plain language (without use of jargon or technical terminology). Parents should be able to understand reports.
- The purpose for the assessment must be clearly stated.
- Only background information relevant to the present assessment should be reported.
- Procedures used, and personnel involved, should be reported.
- Only valid and reliable assessment results should be reported. There are times when an observation may be made, or a test may be given, that the assessor believes is not representative of the student's usual performance. For example, a psychologist may

report that due to anxiety, fatigue, hunger or some other factor, the scores on an intelligence test are not likely a valid indicator of the student's ability. If invalid test results are recorded, the scores, often without the qualifying comments, remain in the student's file. The fact that a particular test was administered and the reasons why the results are not valid should be reported, not the actual test scores.

- Test results should be reported in a way that is in the best interests of the student.
- Test results should be reported in relation to the purpose for testing identified in the report.

The following vignette illustrates the importance of the previous two points:

John, a junior high student, has always done well in school, is well-liked by teachers and students and plays on several school sports teams. Recently, his grade average dropped from 65 to 48%. His parents became concerned and requested an assessment. As part of the assessment, the school psychologist administered a standardized intelligence test. The scores were in the low average range. How should these results be reported?

One can question the purpose of administering the intelligence test in the first place but, given that it was done, there is a bigger problem. Will the student or anyone else benefit from knowing that he scored in the low average range? The student has always done well in school and it is unlikely that low intelligence is the critical factor in his current school problems. What is the best way to inform John, his parents and his teachers of these test results? It is important that the information be communicated in a way that is in the best interests of John, and that answers the parents' question that initially generated the assessment. In this case, it is important not to discourage John and his parents and perhaps mask the real reasons for his current difficulties by placing too much emphasis on the intelligence test score.

- Labels should be avoided. The purpose of an assessment is to better understand a student's strengths and difficulties so that effective educational programs can be developed. Labels are often a perversion of understanding (Egan, 1990) and educators and/or parents may focus on the label, forgetting that it is a gross interpretation of the data and does not provide specific information about a particular student's strengths and weaknesses.
- Clear statements of needs and strategies should be included.
- Recommendations should aim to involve students, parents and teachers. Students have a responsibility in their education and "the child's active involvement in influencing his or her own life should be encouraged" (Sattler, 1988, p. 731).
- An *Individualized Program Plan* (*IPP*) may be included as part of a report or may be developed separately. In either case, it should be derived directly from the recommendations in the report and clearly indicate who will have responsibility for implementing the recommendations. For further information on the development of IPP's, see *Individualized Program Plans* (Alberta Education Response Centre, 1989).
- A plan to evaluate the instructional changes should be included either in the assessment report or in the IPP.

Scores from Group Testing

Throughout the manual, issues have been raised about the reporting of group scores. Recall the vignette in Chapter 2 (*Definition and Purpose of Assessment*, p. 39) regarding screening of children entering a school jurisdiction, and the vignette in Chapter 3 (*Working Through the Assessment Process*, p. 71) about evaluating student achievement following the implementation of a new math curriculum.

Questions were raised about what would be done with the test scores.

- Would only group data be tabulated to ascertain if there is a general problem or would individual scores be generated?
- Would these scores be recorded on students' school records?
- Would parents be routinely informed of their child's score, or only if they ask?
- Will there be follow-up on students who perform poorly on the group testing?

As explained in Chapter 7 (p. 153), it is not enough to record that a student has done poorly on a group test. It is the responsibility of the school to follow-up on all students who score below a predetermined level. Follow-up might start with a similar test given individually. If the student scores at an acceptable level on the test, it may be assumed that factors in the group testing situation contributed to the poorer performance. If the student continues to score poorly, a more in-depth assessment may be warranted.

Determining what is acceptable performance may vary for different children. For example, a student who is known to be gifted, or who has always performed very well, but who scores at the 50th percentile on a group achievement test warrants follow-up assessment.

Access to School Records

There is increasing concern about who has access to school records. It is important that school jurisdictions have written policies regarding school files, written in accordance with the Alberta *School Act* (1988) and the Alberta *School Act: Student Record Regulation* (1989, *Amendment* 1993).

In Alberta, parents have access to their child's complete school record (*School Act*, Section 18(2), p. 19). A school policy should be developed regarding access to information received from outside agencies or individuals that the school does not have the authority to share. Ideally, permission should be obtained from agencies to share all information with parents. In practice, this may not be possible. For example, social service agencies may be willing to share information with the school but not with the family. In such cases, it is questionable if such information should be retained in the student's file.

Another concern involves unofficial files. It is not uncommon for teachers, psychologists and others to keep separate files with anecdotal comments and working notes. It is important that all staff realize that such records can be subpoenaed in a court of law. It is generally not recommended that such records be kept except as temporary working files. The information in these files should be summarized periodically, officially entered in the formal file and then destroyed (Eberline, 1990).

Guidelines for Recording and Reporting Assessment Results

Many concerns expressed by parents regarding assessment results could be alleviated with some forethought and written policies. Table 18 presents questions to consider when developing guidelines for recording and reporting of assessment results.

Table 18
Guidelines for Recording and Reporting Results

1. Is there a written policy concerning the type of information placed in school records (e.g., individual formal tests, group test scores)? The Alberta *School Act: Student Record Regulation* (1989, *Amendment* 1993) requires that test results are placed in students' records.

2. Is there a written policy regarding confidentiality of records?
   - Do parents, teachers and others understand who may have access to a file?
   - Is there a procedure to obtain information on a student from outside parties or to release information to others?
   - Are there written consent forms that parents must sign?

3. Do parents have access to their child's complete school records?
   - Are there separate records kept of information received from other agencies/ individuals that the school does not have the authority to share?
   - Is information in working files transferred to formal files on a regular basis?
   - Many parents have a copy of everything in the file? If not, is there a written policy of what they can and cannot have?
   - Is someone available to go over the file and explain reports that may be unclear? Who?

4. May parents request that certain information be removed from the records?
   - Are there guidelines for such requests?
   - Is there a clear procedure to follow for such a request?

5. Are there guidelines for removing outdated information from records?

6. Are there procedures for communicating this information to all school staff and to parents?

If you answered NO to any of the above, you may wish to consider:

- Developing a policy written in accordance with the Alberta *School Act* and *Student Record Regulation.*
- Developing a written policy on the type of information in, and access to, school records.
- Developing a policy on removal of information from records.
- Developing a process for communication of information to staff and parents.

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SECTION III

GUIDELINES FOR DEVELOPING ASSESSMENT POLICY AND PROCEDURES

- Guidelines for Developing Assessment Policy and Procedures

CHAPTER 9

GUIDELINES FOR DEVELOPING ASSESSMENT POLICY AND PROCEDURES

The following checklist is provided to help you review and/or develop assessment policies and procedures. The checklist is derived from the information presented in the previous chapters. For the following questions, indicate yes (Y), no (N) or don't know (DK) and, where appropriate, specify an individual's position. At the end of each section, space is provided for comments or the addition of items that are important for your jurisdiction.

General Considerations

1. Does your school jurisdiction currently have written policies and procedures regarding assessment?

Yes	No	DK

2. Is there a procedure by which revisions to these policies and procedures can be made?

Yes	No	DK

3. Who has input into the development of, or changes in, policies and procedures?

	Position	Yes	No	DK
a. jurisdiction administrator				
b. school-based administrator				
c. jurisdiction special services				
d. school-based special services				
e. counsellor				
f. resource teacher				
g. special education teacher				
h. regular class teacher				

	Position	Yes	No	DK
i. specialist teacher				
j. parent				
k. student(s)				
l. other				

4. **Are policies and procedures communicated to all staff and parents on a regular basis?**

Yes	No	DK

If yes, who has responsibility for the communication of policies and procedures?

	Position	Yes	No	DK
a. jurisdiction administrator				
b. school-based administrator				
c. jurisdiction special services				
d. school-based special services				
e. counsellor				
f. resource teacher				
g. special education teacher				
h. regular class teacher				
i. specialist teacher				
j. parent				
k. student(s)				
l. other				

5. **Who is responsible for ensuring that assessment policies and procedures are followed?**

	Position	Yes	No	DK
a. individual				
b. committee/team				

If a committee/team, who are the members?

	Position	Yes	No	DK
a. jurisdiction administrator				
b. school-based administrator				
c. jurisdiction special services				
d. school-based special services				
e. counsellor				
f. resource teacher				
g. special education teacher				
h. regular class teacher				
i. specialist teacher				
j. parent				
k. student(s)				
l. other				

Other Issues/Comments:

Articulating a Philosophy of Education and Learning

1. Are provincial policy and the school's/school jurisdiction's philosophies of assessment and instruction discussed in the policy?

Yes	No	DK

Check all who are involved:

	Position	Yes	No	DK
a. jurisdiction administrator				
b. school-based administrator				

	Position	Yes	No	DK
c. jurisdiction special services	______	___	___	___
d. school-based special services	______	___	___	___
e. counsellor	______	___	___	___
g. special education teacher	______	___	___	___
h. regular class teacher	______	___	___	___
i. specialist teacher	______	___	___	___
j. parent	______	___	___	___
k. student(s)	______	___	___	___
l. other	______	___	___	___

2. **Are there formal discussion and/or inservice sessions on factors affecting the education process?**

Yes	No	DK
___	___	___

Check all who are involved:

	Position	Yes	No	DK
a. jurisdiction administrator	______	___	___	___
b. school-based administrator	______	___	___	___
c. jurisdiction special services	______	___	___	___
d. school-based special services	______	___	___	___
e. counsellor	______	___	___	___
f. resource teacher	______	___	___	___
g. special education teacher	______	___	___	___
h. regular class teacher	______	___	___	___
i. specialist teacher	______	___	___	___
j. other	______	___	___	___

3. What topics have been discussed at formal discussion and/or inservice sessions?

	Yes	No	DK
	____	____	____
a. The role of the family in the education process:			
· what responsibilities the family has	____	____	____
· what the school's responsibility is when the family is not able/willing to be involved	____	____	____
b. The role of culture:			
· the impact of cultural differences/disadvantages on assessment and instruction	____	____	____
· how the family's cultural expectations are taken into account	____	____	____
c. Individual differences:			
· whether intelligence can be modified	____	____	____
· whether there are different types of intelligence	____	____	____
· the school's responsibility for developing more than one type of intelligence	____	____	____
· whether personality factors can be modified	____	____	____
· how birth/early development factors affect assessment and instruction	____	____	____
· how delayed developmental milestones affect assessment and instruction	____	____	____
d. The learning process:			
· teacher's role	____	____	____
· student's role	____	____	____
· motivation	____	____	____
· role of self-concept	____	____	____
· current theories of learning	____	____	____

4. Does your school/jurisdiction have anything in writing that describes beliefs or philosophies that guide assessment and instruction?

Yes	No	DK
____	____	____

If yes, check all who were involved in the preparation of the philosophies:

	Position	Yes	No	DK
a. jurisdiction administrator	____________	____	____	____
b. school-based administrator	____________	____	____	____
c. jurisdiction special services	____________	____	____	____
d. school-based special services	____________	____	____	____
e. counsellor	____________	____	____	____
f. resource teacher	____________	____	____	____
g. special education teacher	____________	____	____	____
h. regular class teacher	____________	____	____	____
i. specialist teacher	____________	____	____	____
j. parent	____________	____	____	____
k. student(s)	____________	____	____	____
l. other	____________	____	____	____

Other Issues/Comments:

____

____

____

Pre-Referral and Identification

1. Is there a policy defining *exceptional student* or *exceptional/special need*?

	Yes	No	DK
	____	____	____

If yes,

	Yes	No	DK
a. Is it in writing?	____	____	____
b. Is it available to:			
· teachers?	____	____	____
· parents?	____	____	____
· others?	____	____	____
c. Are teachers and others aware of the policy and is it discussed on a regular basis?	____	____	____

2. Does the policy include:

	Yes	No	DK
a. The level at which student performance on term tests or group achievement tests indicates concern?	____	____	____
· Does the cutoff point vary for different students?	____	____	____
· Is behavior a major factor in deciding when low/high achievement requires attention?	____	____	____
b. Procedures when a concern is raised?			
· Do teachers have a clear understanding of the procedures to be followed if they have a concern?	____	____	____
· Do teachers have a clear understanding of the procedures to be followed if a parent or outside agency expresses concern?	____	____	____
· Do teachers know what they should do if they do not get cooperation from parents?	____	____	____

3. Are there opportunities for all teachers to receive inservice training on identifying exceptional students?

	Yes	No	DK
	____	____	____

Other Issues/Comments:

____

____

____

Referral and Assessment Planning

1. Is there a written policy regarding referral?

	Yes	No	DK
	____	____	____

If yes, does it include the following:

	Yes	No	DK
a. Someone designated to accept and investigate referrals?	____	____	____
b. A procedure to inform parents that their children have been referred for assessment?	____	____	____
c. The information to be gathered before assessment?	____	____	____
· if information is from an outside source, does the school have a procedure to obtain permission in writing from parents?	____	____	____
d. A designated team that makes decisions about whether further assessment is warranted?	____	____	____
· someone designated to inform parents about decisions?	____	____	____
· a policy that informs parents what they can do if they disagree with the team's decision?	____	____	____
e. Guidelines that help set priorities when more students require assessment than resources permit?	____	____	____

2. Is there a written policy regarding assessment planning?

Yes	No	DK

If yes, does it include the following:

	Yes	No	DK
a. Who will be involved?			
b. Who will coordinate the assessment plan?			
c. Procedure if competent personnel are not available to do part or all of the assessments?			
d. Availability of supervision when personnel are learning new tests, approaches, etc.?			
e. Professional development opportunities for staff to learn new approaches?			
f. The use and role of consultants to provide part or all of the assessment?			
g. Procedure to inform parents about the assessment plan?			
h. Procedure to follow if parents disagree with the plan?			

Other Issues/Comments:

Assessment Procedures

1. Is there a written policy regarding the selection of assessment procedures?

Yes	No	DK
____	____	____

If yes, does it describe/require:

	Yes	No	DK
a. Assessment procedures (e.g., rating scale, test) appropriate to the questions posed?	____	____	____
b. A variety of assessment procedures for a comprehensive assessment?	____	____	____
c. Valid procedures?			
· Do assessment devices measure the attributes, traits, skills in question?	____	____	____
· Do assessment results relate to other information about the student (e.g., classroom work, playground observations)?	____	____	____
· Do devices/procedures assess what they purport to assess (e.g., intelligence)?	____	____	____
· Do devices predict what they purport to predict?	____	____	____
d. Use of reliable procedures?			
· Would another tester obtain similar results?	____	____	____
· Would results be similar if the student was assessed again?	____	____	____
· Would results be similar with another form of the test?	____	____	____

2. Is there a policy regarding professional development opportunities for teachers to learn about assessment procedures?

Yes	No	DK
____	____	____

3. Are there procedures for following-up individuals who score poorly on a group assessment?

Yes	No	DK
____	____	____

4. Is there a policy to minimize test bias at all phases of assessment?

Yes	No	DK
____	____	____

Other Issues/Comments:

Guidelines for Recording and Reporting Results

1. Is there a written policy concerning the type of information placed in school records (e.g., individual formal tests, group test scores)?

Yes	No	DK
____	____	____

2. Is there a procedure for informing parents about assessment results?

Yes	No	DK
____	____	____

3. Is there a written policy regarding confidentiality of records?

	Yes	No	DK
	____	____	____
If yes,			
a. Is there clear communication to all concerned regarding who has access to files?	____	____	____
b. Is there a procedure to obtain information about student from outside sources?	____	____	____
c. Is there a procedure to release information to others?	____	____	____
d. Does the procedure include written consent forms, signed by parents, clearly specifying who will receive information?	____	____	____

4. Is there a written policy regarding parental access to school records?

	Yes	No	DK
	____	____	____
If yes,			
a. Are there separate records of information received from other agencies/individuals that the school does not have the authority to share?	____	____	____
b. Is information in working files transferred to formal files on a regular basis?	____	____	____

5. Is someone available to go over files and explain reports that may be unclear?

	Yes	No	DK
	____	____	____

	Yes	No	DK
6. Are there policies and procedures regarding the removal of information from records?	____	____	____
If yes,			
a. May parents make such requests?	____	____	____
b. Is there routine removal of outdated information?	____	____	____

SECTION IV

SUMMARY

SUMMARY

Understanding Students' Needs: A Guide for Developing and Implementing Assessment Procedures for Students Encountering Educational Challenges presents a problem-solving, process-based approach to assessment, in which multiple sources of information are necessary to understand students' needs. Assessment outcomes are viewed as describing needs and influencing education programs, rather than being used to provide labels or justification for why some students are not learning. The manual promotes the belief that well-articulated policies and procedures are critical for an effective assessment program and that the effective development and implementation of policies and procedures is a team effort. The introductory chapter discusses the premises of the manual, assumptions about its users, and the format and structure of the manual.

Following is an overview of the general topics and information presented in this manual.

Chapter 1

Status of Assessment in Your School/Jurisdiction provides the reader with an opportunity to examine current assessment knowledge, beliefs and practices. Questions are posed to help readers work through an assessment completed in their school or jurisdiction. The range of personnel involved in assessment, the types of assessment procedures used and the use made of the assessment results are queried. A key issue is whether the procedures used provide the necessary information to answer the questions of concern. Knowledge of current policies is also ascertained to highlight areas of the manual that might be particularly useful to the reader.

Chapter 2

Definition and Purpose of Assessment presents a discussion of the assessment approach used in this manual and the purposes of assessment. *Assessment* is defined as a process in which **an issue or problem is identified, information is gathered to clarify the issue or problem, intervention strategies are developed and implemented, and the effectiveness of the intervention is evaluated.** The major purpose of assessment is described as the provision of information for educational programming. More specific purposes for assessment discussed include screening, program placement, program planning, program evaluation and monitoring progress. Identifying the specific purpose of assessment is suggested as a critical first step in assessment. Vignettes with issues and decisions to consider are presented to illustrate these purposes.

Chapter 3

Working Through the Assessment Process presents two scenarios, one in which two elementary students are encountering difficulty and one in which a school jurisdiction wants to know how a group of students is doing with a new math curriculum. For each scenario, a series of questions is presented, followed by possible decisions. The reader is guided through an assessment process in which decisions are made about the purpose of the assessment, the questions to be asked, personnel involved, procedures to be used and how the assessment results could be used.

SUMMARY

Chapter 4

Determining Your Philosophy describes how beliefs about the factors that affect students' learning and the learning process itself, affect assessment practice. The ways in which a personal philosophy of education, the set of beliefs and values that guide one's actions, can influence educational practice, are discussed. The role of the family in the education process is an important consideration, both in terms of how family experience affects a child's ability to learn in school and the role of the family in schools. Beliefs about the effect of culture on school performance are also important because they may influence the assessment process and the recommendations made following assessment. Beliefs about individual differences may also affect assessment and programming. The question of how much of intelligence and personality are inherited and whether they can be modified by the environment (family, culture, school) has important implications for teaching and assessment.

Other considerations include how events at birth, events during early development, and the achievement of developmental milestones affect learning and influence one's approach to assessment and the resulting educational recommendations.

The importance of examining beliefs about the learning process itself is stressed. Beliefs about how children learn influence how we teach them, how we evaluate their performance and what we do when a student encounters difficulty learning. In traditional theories of learning, the focus is on what is learned (content), with repetition and reinforcement as primary mechanisms of learning. Recent research and theories stress the importance of process -- students understanding why they are learning (meaning) and how they learn (metacognition and learning strategies). The manual explains that the classification of students according to preferred learning preferences/styles has limited usefulness because higher-level learning requires the integration of various styles and strategies.

Chapter 5

Deciding Who Will Be Assessed discusses stages in the assessment process and particular issues that arise when considering which students will be assessed. Six stages are described: pre-referral screening and identification; referral and assessment planning; assessment; reporting results; developing an action plan and evaluating the program plan. Decisions about who will be assessed occur at the first stage: pre-referral screening and identification. Issues raised include the criteria for assessment referral (e.g., scores on term tests or group achievement tests, behavior) and procedures when a concern is raised either internally or by an outside party such as a parent or an agency.

Chapter 6

Referral and Assessment Planning describes issues to consider when making a referral and planning an assessment. Referral issues include to whom referrals are made, decisions about whether assessment is warranted, input from parents and setting priorities. An assessment plan is presented as a way to ensure that assessment will answer the questions of concern, be systematically organized and coordinated, and that the assessment information will be shared with concerned parties within a specified amount of time. The model presented suggests that the assessment plan be organized in terms of specific questions, appropriate procedures to answer those questions and the involvement of personnel who are competent to do the selected procedures.

SUMMARY

Chapter 7

Assessment Procedures presents an overview of both informal and formal assessment techniques. Informal assessment techniques reviewed include work samples, observations, interviews, informal tests, questionnaires, checklists, rating scales and dynamic assessment. Two formal assessment techniques are reviewed: norm-referenced and criterion-referenced tests. Test terminology is presented to help the reader in the selection, purchase and use of tests. Validity, reliability, percentiles, standard scores, stanines, age and grade equivalents, and types of tests are discussed. Sources of test bias and cautions regarding the use of standardized tests to assess students encountering educational challenges are also presented.

Chapter 8

Assessment Results discusses some issues that should be considered when reporting and recording assessment results. Requirements for effective assessment conferences and reports are suggested. Issues concerning the use of scores from group tests and access to school records are also discussed.

Chapter 9

Guidelines for Developing Assessement Policy and Procedures includes a checklist to help jurisdictions review and develop assessment policies and procedures. The need for written policies and procedures to guide assessment practices is stressed. The importance of a team approach to decision-making, with parent and student participation at all levels, is also suggested. Another issue raised is the need for clear communication of policies and procedures, and opportunities for continuing inservice. Teachers should be knowledgeable about assessment policies and procedures because they are often the first to raise concerns about a student or group of students and to be approached when parents have concerns.

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